11-9-2000

Meeting Notes 2000-11-09 [Part B]

Joint Policy Advisory Committee on Transportation

M E M O R A N D U M

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METRO

Date: November 2, 2000

To: JPACT

From: Andrew C. Cotugno, TPAC Chair

Subject: ***2002-2005 MTIP Process***

At the November 9th meeting, JPACT will be asked to recommend a public process approach for developing the 2002-2005 Metropolitan Transportation Improvement Program (MTIP). The approach will then be subject to a 30-day review period and JPACT and the Metro Council will adopt the process at December meetings. Once the process is established, development of the next MTIP will begin.

Funding in FY 02 and FY 03 has already been allocated in the current MTIP (FY 2000-2003). The current update is concerned with adjusting the first two years of programming, and allocating new funding expected in FY 04 and FY 05. About $25 – $38 million is anticipated to be available. Of this amount, approximately $10 – 15 million will be CMAQ funds which are generally limited to alternative mode projects which improve air quality, and $15 – $23 million will be STP funds, which are available to all projects.

Given the limited resources to be allocated, a streamlined process that draws on highly ranked projects from the last MTIP process is being considered. Such an approach still has a number of policy and technical considerations. The key issues that have been discussed at TPAC include:

1. Whether to allocate resources to limited access highways (freeways). Previous allocations have not allocated flexible federal STP or CMAQ funds to the freeway system. No recommendation has been forwarded on this item from TPAC.

2. Whether to allocate the majority of available funds to large construction projects. The alternative is spread the money to smaller projects or do a combination program of various project sizes. Past allocations have generally funded projects that are less than $6 million, even when resources have been greater. This issue is particularly difficult to address without

being able to evaluate the specific projects. TPAC has suggested remaining flexible on this issue, meaning allow locals to decide their priorities. However, if a "large" project approach is taken, allowances may need to be made in order to ensure a geographic spread of projects.

3. Whether to solicit for new projects. Utilizing the "150%" list from the last allocation process, approximately $56 million worth of projects from around the region were highly ranked, yet unfunded. TPAC has suggested that those projects be considered a "base" package, also including Right-of-Way (ROW) and construction for projects whose Preliminary Engineering (PE) phases were funded in the last process. The unfunded list is included as Attachment A to this memo. Attachment B shows the list by jurisdiction.

Following is more information on these and other procedural issues. The guidance reflects TPAC recommendations and previous comment and direction from the Metro Council Transportation Committee and JPACT. With JPACT concurrence, an approach will be finalized and distributed for public review, with key issues highlighted.

Issues and Guidance

2002-2005 MTIP Goals. Program goals have been recommended in order to provide a clear direction for the process and the program. TPAC recommended goals are:

- Establish a clear, simple, and understandable process that minimizes procedural hurdles while maintaining broad-based citizen participation.
- Fund the most critical projects that provide a clear public benefit.
- Emphasize projects and programs that most efficiently manage demand and enhance the operation of the existing transportation infrastructure. Look for low-cost projects that have large benefits. (Note outstanding issue regarding freeway projects.)
- Continue to use the flexible federal funds to implement the 2040 Growth Concept.
- Consider funding logical project phases or for projects that complete a logical gap in the system.
- Emphasize project construction either through direct funding or leveraging other potential revenue sources.
- Support projects that can be delivered in the timeframe of the FY 2002-2005 STIP.

Criteria and Project Ranking. It is recommended that the ranking criteria remain the same as they were for the last allocation. However, the 150% list projects may need to be re-ranked based on new cost information, and any new projects must be ranked.

Priorities 2000 150% List. TPAC recommends that project funding should first consider the 150% list that remains unfunded from the Priorities 2000 process for the 2000-2003 MTIP.

New Projects. TPAC recommends that limited opportunities for new projects to the 150% list be cautiously allowed as "adds." However, any new projects should be included in the Financially Constrained System of the 2000 RTP or be the result of a recently completed planning activity (e.g., the Gateway Regional Center Plan). Substitute projects should also meet or exceed Metro's requirements for public involvement.

Big Projects v. Small Projects. As noted, TPAC has made no recommendation on this issue. It seems there is interest in seeing the potential differences between a number of medium sized projects compared to an approach similar to what was done for the 2000-2003 MTIP. Choices range between 1) funding the region's priority freeway projects, which have not previously been funded with regional dollars; 2) funding major arterial projects which alone could cost $7 – $10 million each; or 3) funding a variety of smaller, geographically diverse multi-modal projects, which has been the past practice.

As noted, following JPACT and Metro Transportation Committee discussion on these issues, a packet summarizing the process recommendations for comment will be prepared and distributed. An actual process proposal, including the final criteria and a solicitation packet, will be reviewed for approval by JPACT and the Metro Council in December.

MGH:rmb
Attc.

ATTACHMENT A

2000 MTIP UPDATE
UNFUNDED REQUESTS

Rank	A. Planning	Amount
	Residual Unfunded Requests	
NA	**Base Planning Program**	**$1.400**
NA	Green Streets Handbook	$0.090
	Proposed Total:	**$1.490**

Rank		B. Road Modernization	Amount
		Residual Unfunded Requests	
4	MM7	**Gresham/Mult. Co. ITS**	**$1.000**
4	MM7	**Gresham/Mult. Co. ITS**	**0.500**
5	CM7	**Clack. Co. ITS/ATMS**	**0.625**
10	WM10	**Farmington: Hocken/Murray (RW/Con)**	**9.500**
11	WM19	**Greenbrg Rd: Wash Sq/ Tiedeman (RW/Partial Con)**	**0.774**
12	MM3	**223rd O'Xing (RW)**	**0.149**
13	CM2	**Harmony/Linwood/Railroad ROW/Con**	**5.000**
16	WM17	**I-5/Nyberg Interchange (RW/Con)**	**0.783**
19	WM13	**SE 10th: E Main/SE Baseline RW**	**0.495**
43	WM2	Murray Ext: Scholls/Walnut PE/RW	1.707
		Proposed Total:	**$20.533**

Rank		C. Road Reconstruction	Amount
		Residual Unfunded Requests	
2	PR3	NW 23rd:Burnside/Lovejoy	$0.825
3	PR5	SE Holgate: 42nd/52nd	0.797
		Proposed Total:	**$1.622**

Rank		D. Bridge	Amount
		Residual Unfunded Requests	
2	PBr3	**Broadway Brdg Deck Rehab**	**$3.651**
		Proposed Total:	**$3.651**

Rank		E. Freight	Amount
		Residual Unfunded Requests	
2	PF7	Marine Dr: BNSF O'Xing (PE)	$1.294
NA		**I-5 Trade Corridor Study**	**0.250**
NA		**Reg. Freight Prog. Analysis**	**0.050**
		Proposed Total:	**$1.594**

Rank		F. Boulevard	Amount
		Residual Unfunded Requests	
1	MBL1	**Division: Cleveland/Birdsdale**	**$0.289**
3	MBL2	Stark St	0.800
5	PBL2	Gateway Reg. Cntr	1.000
9	WBL1	Cornell: Trail Av/Saltman Rd	1.800
10	CBL4	A Ave Improvement (L.O.)	2.700
12	CBL2	**Willamette Dr.: "A" St/McKillican**	**0.900**
14	WBL6	Hall Blvd: Cedar Hills/Hocken	2.000
15	WBL2	**Main St: 10th/20th (Cornelius)**	**0.500**
		Cornell Rd R/W	0.540
		Hall Blvd PE	0.045
		Proposed Total:	**$10.574**

Rank		G. Pedestrian	Amount
		Residual Unfunded Requests	
1	WP2	Millikan Way: Murray/Hocken	$0.224
7	PBI7	E. Bank Riverfront Access	0.340
		Proposed Total:	**$0.564**

Rank		H. Bike/Trail	Amount
		Residual Unfunded Requests	
1	PBI1	**Morrison Br. Ped/Bike Access.**	**$1.470**
2	CBI3	Phillip Creek Greenway Trail (Con)	0.266
12	PBI3	Marine Dr. Multi-use Trail Segments (Con)	0.500
14	WBI10	**Fanno Crk Trail Phase 2 (Con)**	**0.852**
15	MBI1	**Gresham/Fairview Trail (Con)**	**0.852**
16	PBI2	Peninsula Crossing Trail- Ph. 2	0.359
18	CBI12	Wil. Shoreline Bike Study	0.150
27	PBI6b	**E. Bank Trail - Phase 2 (Con)**	**0.471**
		Proposed Total:	**$4.920**

Rank		I. TDM	Amount
		Residual Unfunded Requests	
5	TDM5	**TMA Assist Program**	**$0.500**
6	TDM4	**Region 2040 Initiatives**	**0.500**
		Regional TDM Program	**1.400**
		ECO Clearinghouse	**0.094**
		SMART TDM Program	**0.110**
		Proposed Total:	**$2.604**

Rank		J. TOD	Amount
		Residual Unfunded Requests	
1	RTOD1	**Metro TOD Program**	**$2.000**
2	PTOD2	N. Macadam Dist Streets	1.500
		Proposed Total:	**$3.500**

Rank		K. Transit	Amount
		Residual Unfunded Requests	
2	WTr2	Wash. Co. Bus Stop Enhancements	$0.675
3	RTr2	**Service Increase for Reg/T.C. TCL**	**2.900**
4	CTr2	**Will. Shoreline Trestle/Track Repair**	**0.397**
6	CTr1	SMART (WilsonVl) Transit Cntr/P&R	1.172
		Proposed Total:	**$5.144**

Total of Residual Unfunded Requests from the 150 percent "cut" list during the FY 2000 MTIP Update: **$56.196**
NOTE: Includes est. FY 04-05 continuation funding of $8.9 mil. for regional programs

Subtotal of Residual Unfunded Requests that received allocation for a first phase or incremental program implementation in the last update: **$39.814**

NOTE: Bold projects received initial phase/partial program implementation funding in the FY 2000 MTIP Update.

ATTACHMENT B

Jurisdictional and Modal Distribution of the Priorities 2000 "150 Percent" List

	Plan'g	Mod	Recon	Freight	Brdg	Blvd	Ped	Bike/ Trail	Transit	Tod	TDM	TOTAL	%
Clackamas		5.625	1.622			3.600	0.000	0.416	1.569		0.110	$12.942	0.23
E. Mult. Co.		1.649	0.000			2.089	0.000	0.852	0.000			$4.590	0.08
COP		0.000	0.000	1.294	3.651	0.000	0.340	2.800	0.000	1.500		$9.585	0.17
Wash. Co.		13.259	0.000			4.885	0.224	0.852	0.675			$19.895	0.35
Regional	1.490	0.000	0.000	0.300					2.900	2.000	2.494	$9.184	0.16
TOTAL	$1.490	$20.533	$1.622	$1.594	$3.651	$10.574	$0.564	$4.920	$5.144	$3.500	$2.604	$56.196	1.00
%	0.03	**0.37**	0.03	0.03	0.06	**0.19**	0.01	0.09	0.09	0.06	0.05	1.00	

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TRANSPORTATION BUDGET REVIEW

	FY 1997	FY 1998	FY 1999	FY 2000	FY2001	Variance FY97 minus FY01
Project Staff Support by Section						
Administration	4.830	4.605	4.660	4.585	4.305	(0.53)
Transportation Planning	17.755	16.211	15.601	15.375	15.090	(2.67)
Public Involvement	6.000	6.000	7.120	4.920	3.020	(2.98)
High Capacity Transportation	18.695	18.961	17.394	12.047	9.715	(8.98)
Travel Forecasting	8.645	8.412	10.600	11.458	8.930	0.29
Transit Oriented Development	1.000	2.500	2.425	3.555	2.800	1.80
Total Staff Support	**56.925**	**56.689**	**57.800**	**51.940**	**43.860**	**(13.065)**
Materials & Services						
General M & S	$931,325	$1,283,164	$1,383,117	$1,121,850	$445,675	($485,650)
Intergovernmental Agreements	$8,004,371	$5,891,000	$6,106,209	$2,725,000	$1,162,500	($6,841,871)
Professional Services	$2,477,044	$2,309,549	$2,353,200	$1,589,400	$1,459,032	($1,018,012)
Total Materials & Services	**$11,412,740**	**$9,483,713**	**$9,842,526**	**$5,436,250**	**$3,067,207**	**($8,345,533)**

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Transportation Demand Management in the Portland Metropolitan Region

Progress Report Through February 2000

Prepared for JPACT

October 19, 2000

TDM

- TDM is a set of strategies that encourage the use of alternative modes to driving alone to:
  - Maximize infrastructure investments
  - Reduce VMT, especially peak-hour
  - Improve air quality
  - Cost-efficient alternative to building new facilities

Background

- TDM Program began in 70's
  - Carpool Matching
  - Rideshare Marketing
- Expansion in 1992
  - TDM Subcommittee Formed
  - Employer Outreach
- Expansion in 1994/1996 -**ECO Rule**
  - Technical Assistance
  - Partnerships
- Currently - Implement Region 2040

Regional TDM Program

- TDM subcommittee:
  - Metro, Counties, TMAs, Cities of Portland, Gresham, SMART/Wilsonville, ODOT, Tri-Met, Citizen, Business, Bike/Ped, Port, Clark County, DEQ, OOE
- Programs at Tri-Met, DEQ, OOE, SMART, local jurisdictions, TMAs

Annual Regional Funding - FY 2003

• Core Regional Program (TM)	$700,000
• Region 2040 Initiatives (TM)	$250,000
• TMA Assistance (TM)	$250,000
• Wilsonville (SMART)	$55,000
• Telecommuting (OOE)	$50,000
• ECO Assistance (DEQ)	$47,000
TOTAL	**$1,352,000**

Programs and Services

Employer Outreach
- TDM Options
- Marketing Materials
- ECO Compliance
- BETC Tax Credits

Support Services
- Emergency Ride Home
- Transit Fare Incentives
- Carpool Matching
- Vanpool Subsidies

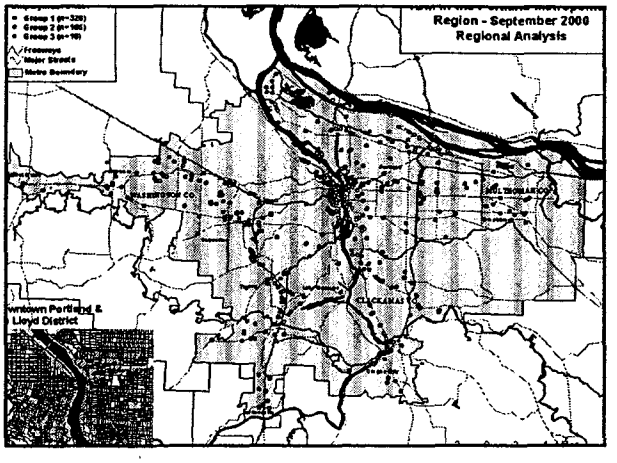
Program Evaluation
- TDM Report
- ECO Surveys

TMA Assistance
- Developing TMAs
- Contract Administration

Research & Development
- Shared-Ride Taxi
- Vanpool Shuttles
- Carpool Incentives

2040 Programs
- Shuttles
- Bike Racks&Lockers

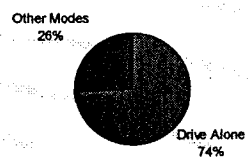
TDM Progress



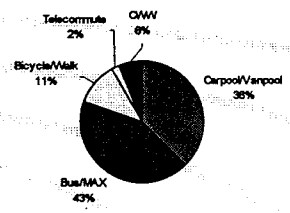
September 2000 TDM Progress Report

- Data for 127,147 employees at 503 employment sites
- 6% reduction in daily auto trips

Overall Mode Split (230,000 Daily Commute Trips)



Mode Split Breakdown (60,000 Daily Commute Trips)



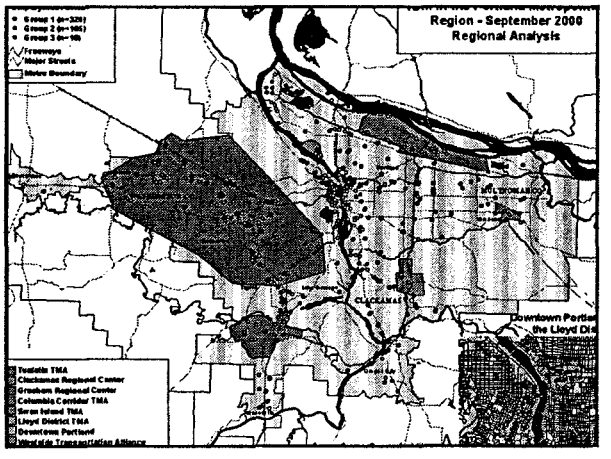
Mode Shifts Since 1994

- 10,700 daily auto trip reduction
- 79,400 daily VMT reduction
- Equivalent capacity of 10 highway lane miles

Cost-Effectiveness

- Maximizes efficiency of existing infrastructure
- For every public dollar spent on TDM, private sector spends an additional $4-5

TMAs and Marquam Hill



TMA Funding

Start-Up Funds:

- Lloyd, WTA, Tualatin, Columbia Corridor (Airport Way), Swan Island

Exploratory Funds:

- Clackamas, Gresham, APP (Downtown Portland)

Future Exploratory Funds:

- Troutdale, Lake Oswego (Kruse Way), Columbia Corridor (Rivergate)

TMA Progress

- Goals and Objectives to Reduce SOV and VMT
- Gaining Business and Local Jurisdiction Support
- Annual Reports to include:
  - Identify Goals Met
  - Identify Local Match to Regional Funds
  - Estimated SOV and VMT Reduction
  - Documents Outreach Activities
  - Outlines Future Activities

Programs and Services

Region 2040 Programs

Ridesharing

- Carpool Incentives
- Vanpools
- Vanpool Shuttles

SUMMARY

- TDM Programs, Services, Innovations and Partnerships go to reducing SOV and VMT

Next Steps

- Continue focus on implementing 2040 through RTP
- Leverage partnerships
  - Vanpool Shuttles
  - Jobs Access
  - Local Jurisdictions
- Technology

Transportation Demand Management in the Portland Metropolitan Region

Progress Report Through February 2000

Prepared for JPACT
October 19, 2000

TRANSPORTATION DEMAND MANAGEMENT IN THE PORTLAND METROPOLITAN REGION

(PROGRESS REPORT THROUGH FEBRUARY 2000)

Prepared by Tri-Met
Marketing Information
September 2000

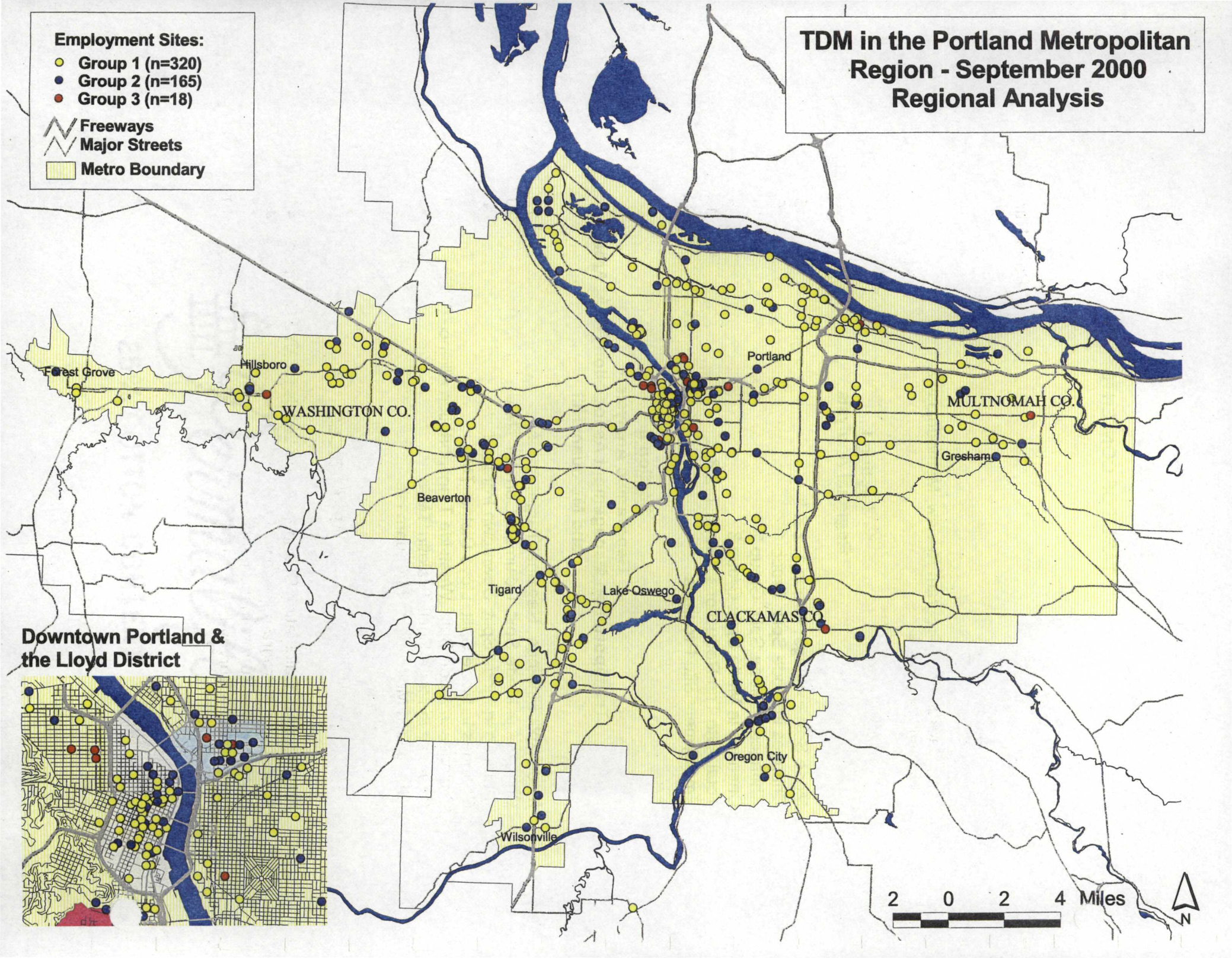

Employment Sites:
Group 1 (n=320)
Group 2 (n=165)
Group 3 (n=18)
Freeways
Major Streets
Metro Boundary
TDM in the Portland Metropolitan Region - September 2000 Regional Analysis
Forest Grove
Hillsboro
WASHINGTON CO.
Portland
MULTNOMAH CO.
Gresham
Beaverton
Tigard
Lake Oswego
CLACKAMAS CO.
Oregon City
Wilsonville
Downtown Portland & the Lloyd District
2 0 2 4 Miles
N

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The Portland, Oregon, metropolitan region's transportation demand management (TDM) program focuses on strategies that encourage the use of alternative forms of transportation, rather than driving alone to work. The goals of TDM are to reduce vehicle miles traveled (VMT), reduce traffic congestion, improve air quality, enhance mobility, and make the existing transportation system more efficient.

TDM measures were introduced in the Portland metropolitan region in the 1970s with a regional carpool matching program and introductory marketing efforts. Throughout the 1990s federal, state and local governments passed legislation and provided funding to make TDM a significant part of the region's transportation strategy.

Section I: Regional Analysis

In this report, the effectiveness of the TDM strategies is measured by reductions in the number of work trips made in automobiles. The data used in this report were derived from employers required by the Employee Commute Options (ECO) Rule to reduce auto trips to the worksite by 10% (within a three year timeframe), as well as those who voluntarily surveyed their employees for other business purposes. The mode split findings in Section I of this report are assembled into three groups:

- Group 1: 320 employment sites, representing 68,710 employees. This group includes the results of a baseline and one follow-up survey conducted to assess changes in employee commute choices. The average time elapsed between surveys is approximately 1.3 years.

- Group 2: 165 employment sites, representing 49,543 employees. This group includes the results of a baseline and two follow-up surveys conducted to assess changes in employee commute choices. The average time elapsed between surveys is approximately 2.6 years.

- Group 3: 18 employment sites, representing 8,894 employees. This group includes the results of a baseline and three follow-up surveys conducted to assess changes in employee commute choices. The average time elapsed between surveys is approximately 3.9 years.

Employer sites from all three groups are shown on the adjacent map.

Highlights

Group 1: Analysis of mode split findings for Group 1 reveals that employers generally made progress in reducing auto trips to their worksites. Comparing data from baseline to the first follow-up survey indicates the following:

- One-way auto trips made each weekday to the worksite were reduced 4% from baseline to follow-up surveys.
- The majority of *drive alone* trips reduced (2,114) were shifted to *bus/MAX* (2,084).
- Sixty-eight (68%) percent of employers made at least some progress toward meeting their auto trip reduction goals.
- One in four employment sites in Group 1 reached or exceeded a 10% reduction in auto trips to the work site.

Group 2: Analysis of mode split findings for Group 2 revealed that employers made continuous progress in reducing auto trips to the worksite over two follow-up surveys. Comparing data from baseline to the second follow-up survey indicates the following:

- One-way auto trips made each weekday to the worksite were reduced 8% from baseline to the second follow-up survey.
- The majority of *drive alone* trips reduced (2,897) were shifted to *bus/MAX* (2,343).
- Most (82%) employers made at least some progress toward meeting their auto trip reduction goals.
- One-third of the employers in Group 2 reached or exceeded a 10% reduction in auto trips to their worksites.

Group 3: Analysis of mode split findings for Group 3 revealed continued progress reducing *drive alone* trips below baseline levels. However, such trips have steadily increased following the first follow-up survey. Of all alternative modes, *bus/MAX* appeared to show the most consistent increase in usage. Comparing data from baseline to the third follow-up survey indicates the following:

- One-way auto trips made each weekday to the worksite were reduced 3% from baseline to the third follow-up survey.
- Increases in trips made via *bus/MAX* (252) were drawn from reductions in *drive alone* trips and *bike/walk* trips.

- The majority (83%) of employers made at least some progress toward meeting their auto trip reduction goals.

- Over one-third (38%) of the employers in Group 3 reached or exceeded a 10% reduction in auto trips to their worksites.

Section II: Geographic Analysis - Transportation Management Association (TMA) Areas and Marquam Hill

Regional funds are granted to TMAs on the condition that the goals and objectives of the organization will work to reduce single occupant vehicle trips and vehicle miles traveled. The 1999 Regional Transportation Plan identified eleven existing and potential TMA areas for regional funding. This report includes analysis for TMA areas where sufficient data exists.

Additionally, Marquam Hill employers have actively pursued TDM programs for the past five years, although have not applied for regional TMA funding. Tri-Met has tracked TDM progress of this area through a Partnership Plan since 1995 and this data is also included in this section.

The region is currently providing TMA start-up funds to:
- Tualatin TMA
- Westside Transportation Alliance (WTA)
- Lloyd District TMA
- Swan Island TMA
- Columbia Corridor Transit Management Alliance

These areas currently receive TMA Exploratory funds:
- Downtown Portland (Association for Portland Progress)
- Downtown Gresham (Gresham Downtown Development Association
- Clackamas Regional Center (Clackamas County)

The following areas are scheduled to receive TMA Exploratory funds:
- Troutdale
- Lake Oswego Kruse Way
- Columbia Corridor Rivergate

TMA areas with sufficient data for analysis presented in this report include:
- Tualatin TMA
- WTA
- Lloyd District TMA
- Columbia Corridor TMA
- Downtown Portland
- Marquam Hill

Highlights

- All TMA areas and Marquam Hill experienced a reduction in drive-alone trips.

- Auto trips that were reduced went to a variety of different modes depending on the services available in each area. For example, the predominate non-SOV mode in the WTA area is carpooling which continues to grow (although not as rapidly as transit use). In Lloyd District however, carpooling use (once equivalent to transit use) is experiencing a decline while transit use substantially increases.

CONCLUSIONS

Transportation Demand Management efforts continue to make a positive difference in the region, as evidenced by the fact that the majority of employment sites in both groups 1, 2 and 3 have made substantial reductions in the number of auto trips made to the worksite. Together, over five hundred employment sites have reduced 10,730 *weekday* auto trips to and from the worksite region-wide.

Metro projects that the current one-way auto trip commute length in the region is 7.4 miles. Based on this travel distance, approximately 79,402 daily vehicle miles traveled have been reduced. *

Surveys from groups 2 and 3 provide the first look at commute mode changes from baseline through second and third follow-up surveys. The trends in such groups show some leveling-off of commuter trips, changing from driving alone to alternative modes.

This analysis marks the first attempt to focus on TMA areas. While commute data for these areas is limited, preliminary analysis of selected target areas included in this report reveals that progress is positive with regards to reducing drive alone commute trips.

* Equilibrated 1994 Metro Model

TDM BACKGROUND, PROGRAM REVIEW AND METHODOLOGY

Background

The Portland metropolitan region's transportation demand management (TDM) program includes strategies that encourage the use of forms of transportation other than single-occupant automobiles. The goals of TDM are to reduce vehicle miles traveled (VMT), reduce traffic congestion, improve air quality, enhance mobility and make the existing transportation system more efficient.

TDM effectiveness is measured by the proportion of people shifting from driving alone to using transit, carpools or vanpools, telecommuting, biking, walking, or working compressed work week schedules.

Organizations that provide TDM information and services in the Portland metropolitan region are presented below.

1. Tri-County Metropolitan Transportation District of Oregon (Tri-Met)
2. Department of Environmental Quality (DEQ)
3. Oregon Office of Energy (OOE)
4. Transportation Management Associations (TMAs)
5. South Metro Area Rapid Transit (SMART)
6. Metro

Program Review

This TDM report documents a share of all commute trips made in the region. Figure A-1 (see Appendix B) shows the rate of growth of home to work trips in the region each day and compares how the TDM program is capturing a portion of these trips.

Employers have administered TDM commuter choice surveys as early as January 1994. As of the first quarter of 2000, a total of 1,487 baseline and various follow-up reports have been processed and reported. Tri-Met processed 752, DEQ processed 526, and other associations and individuals processed another 204. The greatest concentration of surveys came in just after the ECO Rule was underway in 1996, the last quarter of 1996 and the first two quarters of 1997. (Table A-4, see Appendix B)

Tri-Met has provided direct services to employers in the region. Employer outreach services include information on TDM options, on-site marketing materials and ECO compliance assistance. Support services include emergency ride home, transit fare incentives (PASSport, Transit Checks, etc.), carpool matching database and vanpool subsidies. Research and development involving shared-ride taxi, vanpool shuttles and carpool incentives is also available. Additional assistance to employers is offered by Transportation Management Associations (TMA's), SMART, DEQ and OOE.

The Oregon Office of Energy (OOE) provides a Business Energy Tax Credit (BETC) to employers who fund alternative transportation modes across the state of Oregon. The BETC program covers employers conserving energy resources through transportation alternatives and other upgrades to company efficiency. The program started in 1992 with credits to employers who set up telework offices (in the home or close to the home of their employees) and employers who bought commuter pool vehicles to facilitate ridesharing. To date, 26 applications for telework BETCs have been approved and 2 for commuter pool vehicles in Multnomah, Washington and Clackamas counties.

Transit subsidies became eligible for BETCs in 1998, and 53 have been approved in the same three counties.

New BETCs offered by OOE in 2000 reimburse financial incentives employers provide directly to employees, costs to provide bicycle facilities, and the dues an employer pays into their local TMA. One employer has been approved for financial incentives and another for TMA dues in the tri-county area. No bicycle BETCs have been applied for in the tri-county area yet. (Table A-5, see Appendix B)

Methodology

The data analyzed in this report come from surveys taken by employers across the Portland metropolitan region. These employers conduct employee commute mode surveys to comply with DEQ ECO rules or for other business purposes.

All employers administered their own surveys and, nearly all passed them on to DEQ, Tri-Met, Lloyd District Transportation Management Association, Tualatin Transportation Management Association or Westside Transportation Alliance (WTA) for tabulation and analysis.[1] Several employers tabulated and reported their own survey results.

Completed surveys met one of the two following conditions in order to be considered valid:

1. A 75% response rate to the survey was achieved if the entire workforce was issued a survey; or,
2. A sample of the population (determined by ECO guidelines) returned a 75% response rate (Refer to OAR 340-030-0800 through 1080).

In general, employers conduct surveys one year apart.

[1] Appendix C and D show examples of questionnaires used by employers and Tri-Met's Survey Data Form.

TDM Historical Reference

TDM measures were introduced in the Portland metropolitan region in the 1970s with a regional carpool matching program and introductory marketing efforts housed at Tri-Met. In 1991, the State of Oregon passed the Transportation Planning Rule (TPR) which required a reduction in automobile trips through TDM efforts. In the early 1990s, federal legislation (1990 Clean Air Act) and funding (Intermodal Surface Transportation Efficiency Act) provided another opportunity for TDM to become a significant part of the region's transportation strategy. The importance of TDM to the region was confirmed by a 1994 Metro study on TDM and Oregon's 1996 Employee Commute Options (ECO) rules (regulated by the Department of Environmental Quality). TDM measures are also included in the Regional Transportation Plan (RTP) to help the region achieve its 2040 Growth Concept land use and accessibility goals.

Local jurisdictions implemented land use and parking strategies to impact TDM measures:

- Title 2 of the Metro Urban Growth Management Functional Plan (UGMFP) establishes a regional parking policy with regional parking ratios that include reducing minimum parking standards and establishing parking maximums by land use type.

- Title 6 of the UGMFP describes a process to identify transportation mode split targets and includes TDM as one of several strategies to consider in addressing traffic congestion.

Section I
Regional Analysis

MODE SPLIT FINDINGS: Groups 1, 2 and 3

Mode split findings illustrate the commute (mode) choices employees make traveling to their worksite. Mode split refers to the reported use of each commute option as a percent of the total work trips. Progress with regards to auto trip reduction is measured by comparing baseline survey findings against follow-up survey results.

The mode-split findings in this report are assembled into three groups.

- Group 1 (n=320 employment sites) includes results of baseline and one follow-up survey to assess commute choices.

- Group 2 (n=165 employment sites) includes the results of baseline and two follow-up surveys.

- Group 3 (n=18 employment sites) includes the results of baseline and three follow-up surveys.

Analysis of mode split findings for each group is provided separately along with an overall assessment of auto trips reduced region-wide.

Changes in Mode Split: Group 1

As of February 2000, there were 320 employment sites in the Portland metropolitan region that had completed a baseline and one follow-up survey of its employees.

In terms of "percentage change" from baseline to first follow-up survey, growth is apparent in trips taken telecommuting (+136%) and via bus/MAX (+56%). *Bus/MAX* experienced the largest increase in absolute trips with a 2,084 increase. A slight gain was also recorded in compressed workweek (+9%) usage. Levels of usage for trips taken carpooling or vanpooling were on par with baseline levels, while trips made bicycling or walking decreased (-14%). (Table 1)

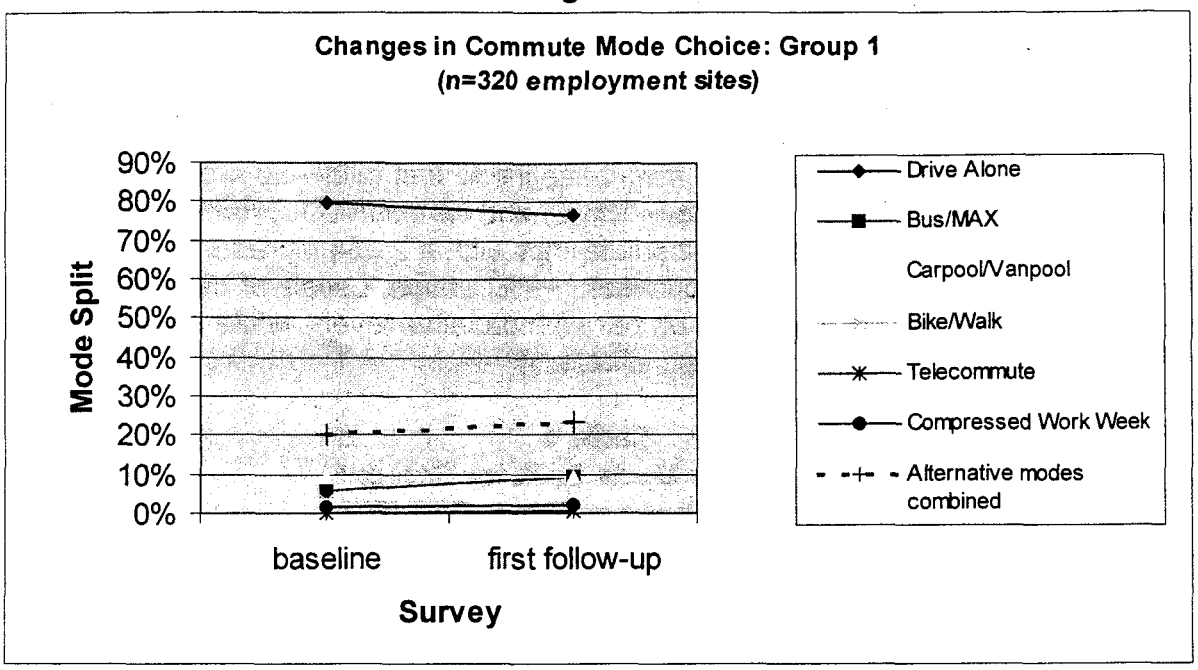
Table 1
Changes in Mode Split for Group 1
Average Weekday Trips, One-Way
(n=320 Employment Sites)[1]

Commute Mode	Baseline Trips[2] (A) #	%	First Follow-up Trips (B) #	%	Percentage Change [(B-A)/A]*100
Drive alone	50,774	80%	48,660	77%	-4%
Carpool/Vanpool	6,024	9%	6,046	10%	0
Bus/MAX	3,735	6%	5,819	9%	+56%
Bicycle/Walk	1,815	3%	1,562	2%	-14%
Telecommute	121	0%	286	0%	+136%
Compressed work week	1,070	2%	1,165	2%	+9%
TOTAL	**63,538**		**63,538**		

[1]Represents estimates for 68,710 employees
[2]Baseline trips are calibrated to follow-up trips to provide a basis for comparison (see Appendix A for a detailed explanation).

Changes in Table 1 are represented graphically in Figure 1. Responses from Group 1 indicate decreases in *drive alone* and *bicycle/walk* commute trips, increases in *telecommute, bus/MAX* and *compressed workweek.* (Figure 1). When considering all *alternative modes combined*, increases in such trips nearly mirror the reductions in *drive alone* trips.

Figure 1



Data source: responses are representative of 68,710 employees

Changes in Mode Split: Group 2

As of February 2000 there were 165 employment sites in the Portland metropolitan region that had completed a baseline and two follow-up surveys of its employees.

Table 2 analyzes the data by comparing the "percentage change" from one survey to another. In this case, the mode experiencing the largest increase in usage was recorded by the *telecommute* (+141%) option, followed by *compressed workweek* (+128%). *Bus/MAX* (+66%) also made substantial gains in usage. C*arpool/vanpool* saw a slight reduction in usage (-3%). Much like Group 1, Group 2 showed the greatest gain in absolute trips in *bus/MAX* (2343). (Table 2)

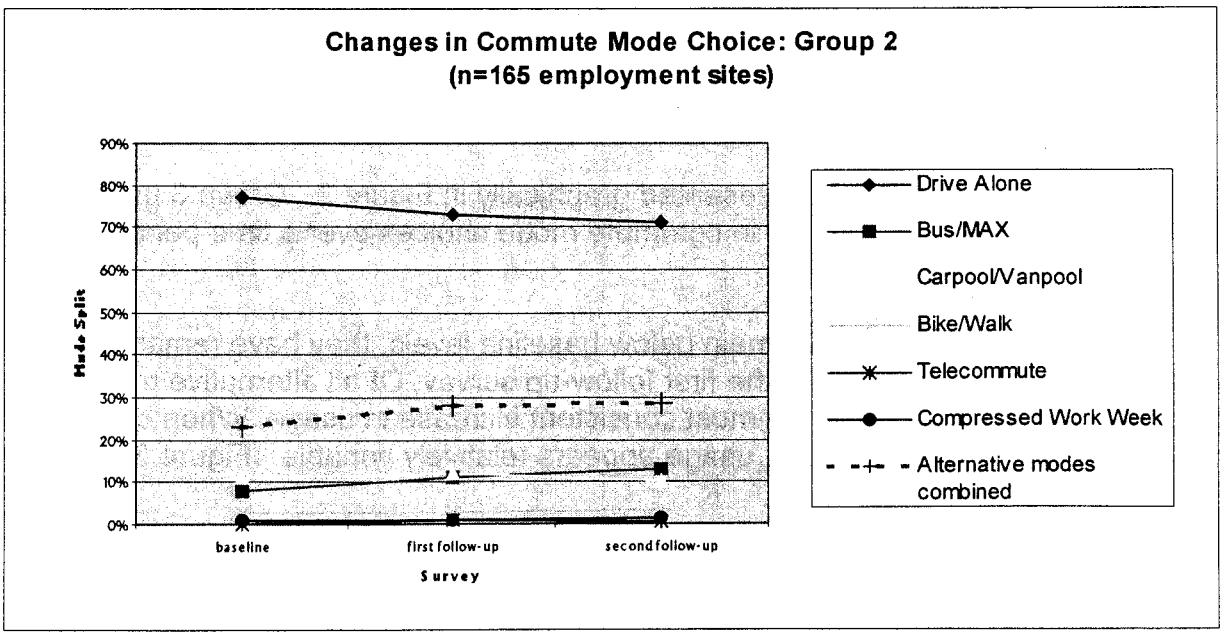
Table 2
Changes in Mode Split for Group 2
Average Weekday Trips, One-Way
(n=165 Employment Sites)[1]

Commute Mode	Baseline Trips[2] (A) #	%	First Follow-Up Trips[2] (B) #	%	Second Follow-up Trips (C) #	%	Percentage Change [(C-A)/A]*100
Drive alone	34,150	77%	32,063	73%	31,253	71%	-8%
Carpool/Vanpool	4,726	11%	5,210	12%	4,582	10%	-3%
Bus/MAX	3,575	8%	4,874	11%	5,918	13%	+66%
Bicycle/Walk	1,288	3%	1,313	3%	1,487	3%	+15%
Telecommute	105	0%	240	1%	254	1%	+141%
Compressed work week	274	1%	419	1%	624	1%	+128%
TOTAL	**44,119**		**44,119**		**44,119**		

[1]Represents estimates for 49,543 employees
[2]Baseline and first follow-up trips are calibrated to second follow-up trips to provide a basis for comparison (see Appendix A for a detailed explanation).

Changes in Table 2 are represented graphically below (Figure 2). Commute trends indicate a steady increase in trips made via *bus/MAX*. *Carpool/vanpool* trips appear relatively unchanged from baseline through second follow-up. When considering all *alternative modes combined*, increases in such trips nearly mirror the reductions in *drive alone* trips. (Figure 2)

Figure 2



Data source: responses are representative of 49,543 employees

Changes in Mode Split: Group 3

As of February 2000 there were 18 employers in the Portland metropolitan region that had completed a baseline survey of employees and three follow-up surveys.

Table 3 analyzes the data by comparing the "percentage change" from one survey period to another. In this case, the modes experiencing the largest increase in usage were recorded by the *compressed workweek* (+52) and *telecommute* (+48%) options. B*us/MAX* (+33%) has also made substantial gains in usage, leading the way in increased trips (252). Of all alternative modes, *bicycle/walk* was the only to see a reduction (-39%). (Table 3)

Table 3
Changes in Mode Split for Group 3
Average Weekday Trips, One-Way
***(n=18 Employment Sites)*[1]**

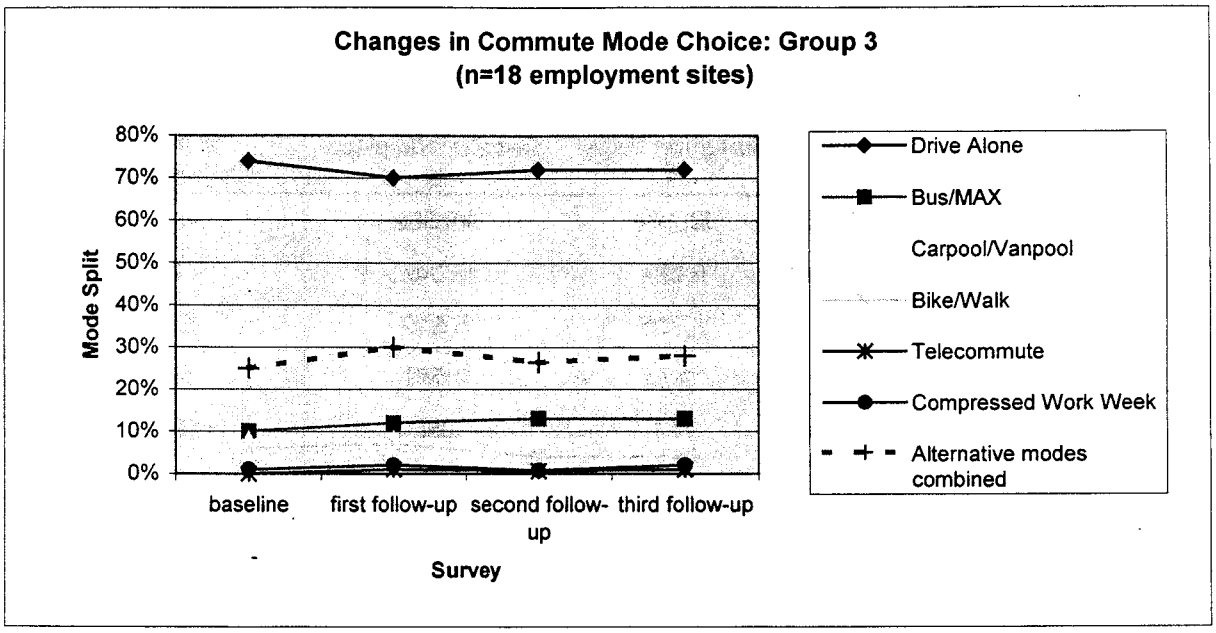
Commute Mode	Baseline Trips[2] (A) #	%	First Follow-up Trips[2] (B) #	%	Second Follow-up Trips[2] (C) #	%	Third Follow-up Trips (D) #	%	Percentage Change [(D-A)/A]*100
Drive alone	5,610	74%	5,296	70%	5,427	72%	5,440	72%	-3%
Carpool/Vanpool	578	8%	618	8%	642	9%	619	8%	+7%
Bus/MAX	757	10%	944	13%	1,017	13%	1,009	13%	+33%
Bicycle/Walk	477	6%	493	7%	327	4%	289	4%	-39%
Telecommute	29	0%	40	1%	47	1%	43	1%	+48%
Compressed work week	99	1%	159	2%	91	1%	150	2%	+52%
TOTAL	**7,550**		**7,550**		**7,550**		**7,550**		

[1]Represents estimates for 8,894 employees
[2]Baseline, first follow-up and second trips are calibrated to third follow-up trips to provide a basis for comparison (see Appendix A for a detailed explanation).

Changes in Table 3 are represented graphically in Figure 3. Group 3 provides the opportunity to observe changes in commute mode choices over a time period spanning four surveys.

Though *drive alone* trips remain below baseline levels, they have remained somewhat consistent following the first follow-up survey. Of all alternative modes, *bus/MAX* appeared to show the most consistent increase in usage. When considering all *alternative modes combined*, usage appears relatively variable. (Figure 3)

Figure 3



Data Source: responses are representative of 8,894 employees

Total Auto Trip Reductions: Group 1, 2 and 3

The total auto trips reduced method of analysis combines the number of drive alone trips with auto trips made by the vehicles from carpools and vanpools to determine the total number of automobiles used for commute trips. For example, a two-person carpool counts for two employee trips but only one auto trip.

Table 4, below, shows the estimated reduction in total auto trips. The survey data shows that a 4% reduction was made in auto trips for employers in **Group 1.** This reduction equates to 2,124 fewer weekday auto trips to thew worksite.

Baseline to second follow-up analysis of **Group 2** indicates that employers were successful in reducing 8% of their auto trips, eliminating 3,082 weekday auto trips to the worksite. (Table 3)

Baseline to third follow-up analysis of **Group 3** indicates that employers reduced 3% of their auto trips, eliminating 159 weekday auto trips to the worksite. (Table 3)

The combined reduction of auto trips by **Group 1, 2 and 3** is 6%. Together, they reduced a total of 5,365 weekday auto trips to the worksite region-wide. (Table 4)

Table 4
Total *Change in Trips One-Way (to Work) per Weekday*

GROUP 1[1]	Baseline Trips A	Follow-up Trips from most Recent follow-up B	Percentage Change In Trips [(B-A)/A]*100
Drive Alone	50,774	48,660	-4%
Carpool/Vanpool	6,024	6,046	0
Bus/MAX	3,735	5,819	+56%
Bicycle/Walk	1,815	1,562	-14%
Telecommute	121	286	+136%
Compressed work week	1,070	1,165	+9%
Auto Trips	**53,605**	**51,481**	**-4%**

GROUP 2[2]	Baseline Trips A	Follow-up Trips from most Recent follow-up B	Percentage Change In Trips [(B-A)/A]*100
Drive Alone	34,150	31,253	-8%
Carpool/Vanpool	4,726	4,582	-3%
Bus/MAX	3,575	5,918	+66%
Bicycle/Walk	1,288	1,487	+15%
Telecommute	105	254	+141%
Compressed work week	274	624	+128%
Auto Trips	**36,432**	**33,350**	**-8%**

GROUP 3[3]	Baseline Trips A	Follow-up Trips from most Recent follow-up B	Percentage Change In Trips [(B-A)/A]*100
Drive Alone	5,610	5,440	-3%
Carpool/Vanpool	578	619	+7%
Bus/MAX	757	1,009	+33%
Bicycle/Walk	477	289	-39%
Telecommute	29	43	+48%
Compressed work week	99	150	+52%
Auto Trips	**5,892**	**5,733**	**-3%**

RESULTS COMBINED			
GROUPS 1, 2 & 3 (combined[4])	**Baseline Trips A**	**Follow-up Trips from most Recent follow-up B**	**Percentage Change In Trips [(B-A)/A]*100**
Drive Alone	90,534	85,353	-6%
Carpool/Vanpool	11,328	11,247	-1%
Bus/MAX	8,067	12,746	+58%
Bicycle/Walk	3,580	3,338	-7%
Telecommute	255	583	+129%
Compressed work week	1,443	1,939	+34%
Auto Trips	**95,929**	**90,564**	**-6%**

[1]320 employment sites, with 68,710 employees
[2]165 employment sites, with 49,543 employees
[3]18 employment sites, with 8,894 employees
[4]503 employment sites, with 127,147 employees

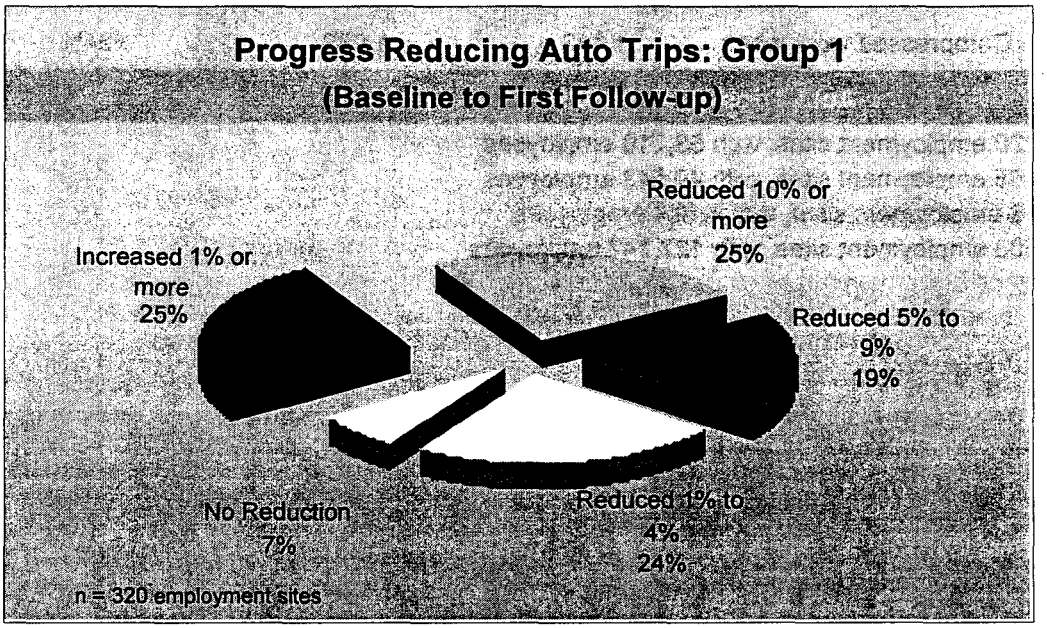
Employment Site Progress

The majority of employers included in this study are making positive progress towards reducing auto trips to the worksite.

Group1

Over one-third of employment sites (68%) in Group 1 showed at least some progress in reducing auto trips from baseline to their first follow-up survey. Twenty-five percent achieved a 10% reduction in auto trips. However, 25% had an increase of 1% or more in auto trips in the time between survey efforts. (Figure 4)

Figure 4

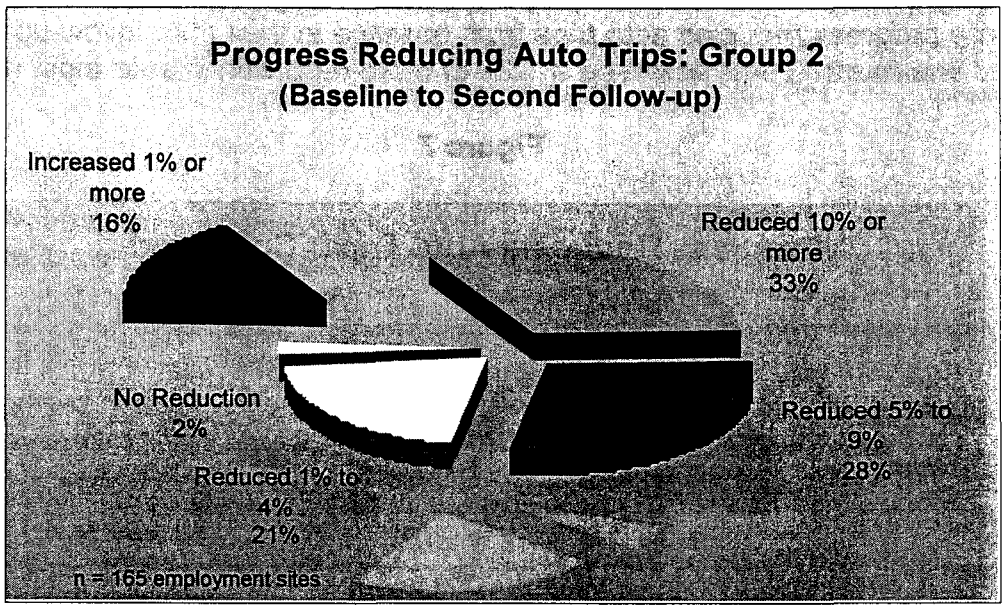


Data source: responses are representative of 68,710 employees

Group 2

Eighty-two percent of the employment sites in Group 2 made at least some progress reducing auto trips from baseline to their second follow-up survey. One-third (33%) achieved a 10% or more reduction in auto trips. (Figure 5)

Figure 5

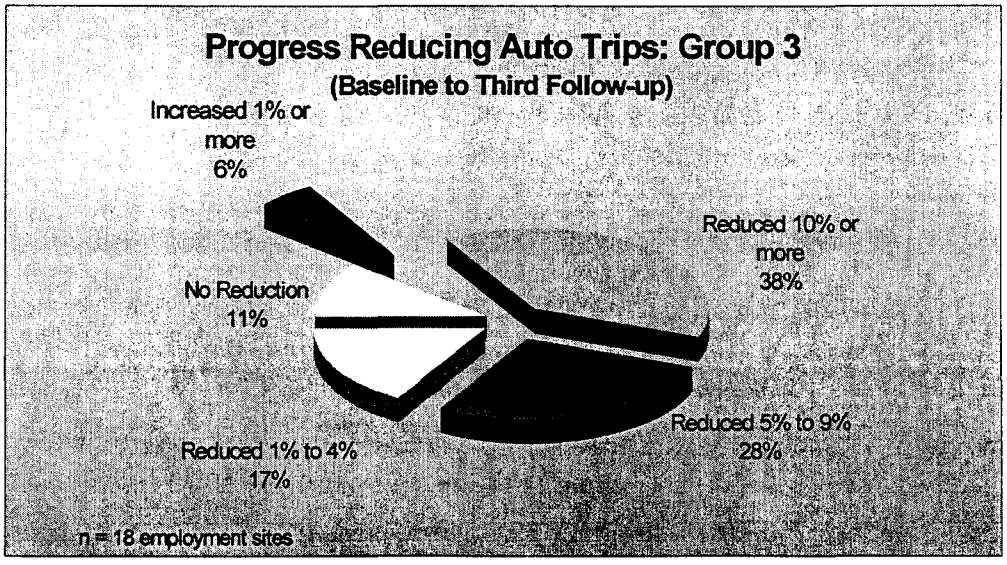


Data source: responses are representative of 49,543 employees

Group 3

Eighty-three percent of the employment sites in Group 3 made at least some progress reducing auto trips from baseline to their third follow-up survey. Over one-third (38%) achieved a 10% or more reduction in auto trips. (Figure 6)

Figure 6

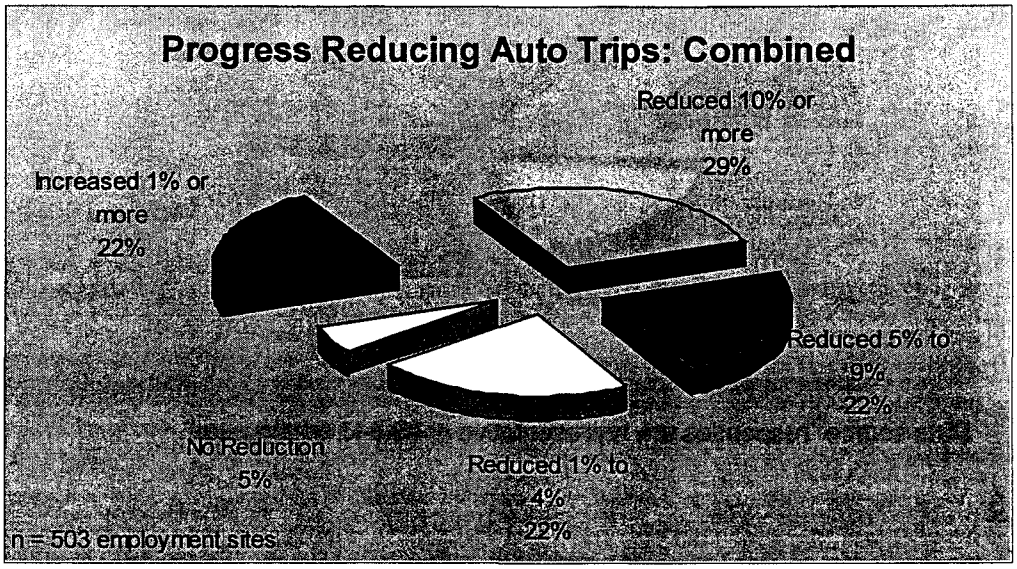


Data Source: responses are representative of 8,894 employees

All Groups Combined

Seventy-three percent of the employment sites in all groups combined made at least some progress reducing auto trips from baseline to their third follow-up survey. Just over one-fourth (29%) achieved a 10% or more reduction in auto trips. (Figure 7)

Figure 7



Data Source: responses are representative of 127,147 employees

Section II
Geographic Analysis - Transportation Management Association (TMA) Areas and Marquam Hill

MODE SPLIT FINDINGS: TMA Areas and Marquam Hill

Regional funds are granted to TMAs on the condition that the goals and objectives of the organization will work to reduce single occupant vehicle trips and vehicle miles traveled. The 1999 Regional Transportation Plan identified eleven existing and potential TMA areas for regional funding. This report includes analysis for TMA areas where sufficient data exists.

Additionally, Marquam Hill employers have actively pursued TDM programs for the past five years, although have not applied for regional TMA funding. Tri-Met has tracked TDM progress of this area through a Partnership Plan since 1995 and this data is also included in this section.

The region is currently providing TMA start-up funds to:
- Tualatin TMA
- Westside Transportation Alliance (WTA)
- Lloyd District TMA
- Swan Island TMA
- Columbia Corridor Transit Management Alliance

These areas currently receive TMA Exploratory funds:
- Downtown Portland (Association for Portland Progress)
- Downtown Gresham (Gresham Downtown Development Association
- Clackamas Regional Center (Clackamas County)

The following areas are scheduled to receive TMA Exploratory funds:
- Troutdale
- Lake Oswego Kruse Way
- Columbia Corridor Rivergate

TMA areas with sufficient data for analysis presented in this report include:
- Tualatin TMA
- WTA
- Lloyd District TMA
- Columbia Corridor TMA
- Downtown Portland
- Marquam Hill

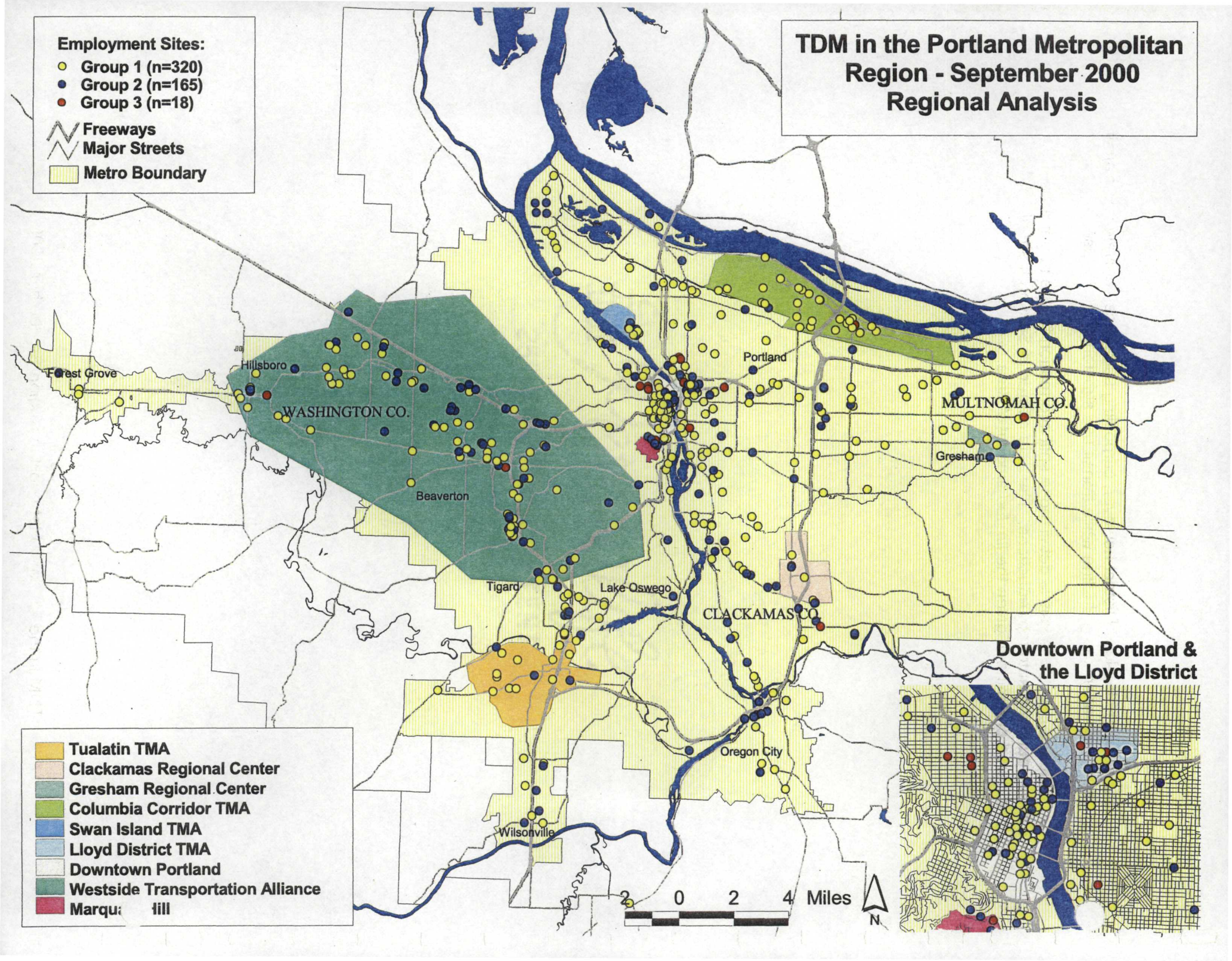
Highlights

- All TMA areas and Marquam Hill experienced a reduction in drive-alone trips.

- Auto trips that were reduced went to a variety of different modes depending on the services available in each area. For example, the predominate non-SOV mode in the WTA area is carpooling which continues to grow (although not as rapidly as

transit use). In Lloyd District however, carpooling use (once equivalent to transit use) is experiencing a decline while transit use substantially increases.

Included in this analysis is detail mode split information for the target areas actively pursuing auto trip reductions. The data offered in Section II should be considered preliminary, given the *limited amount* of data.


TDM in the Portland Metropolitan Region - September 2000 Regional Analysis
Employment Sites:
Group 1 (n=320)
Group 2 (n=165)
Group 3 (n=18)
Freeways
Major Streets
Metro Boundary
Forest Grove
Hillsboro
WASHINGTON CO.
Beaverton
Tigard
Lake Oswego
Portland
MULTNOMAH CO.
Gresham
CLACKAMAS CO.
Oregon City
Wilsonville
Downtown Portland & the Lloyd District
Tualatin TMA
Clackamas Regional Center
Gresham Regional Center
Columbia Corridor TMA
Swan Island TMA
Lloyd District TMA
Downtown Portland
Westside Transportation Alliance
Marqu ill
2 0 2 4 Miles
N

Changes in Mode Split: Columbia Corridor TMA Area

Employment sites in the Columbia Corridor reduced five percent of the trips made to the worksite by *drive alone* commuters. The redistribution of trips has resulted in increased *bus/MAX* (+51%) and *carpool/vanpool* (+22%) usage. Aside from a slight decrease in *compressed workweek* usage, use of other modes remains relatively low and unchanged. (Table 5)

While *carpooling/vanpooling* is the predominant alternative mode of commuting in the Columbia Corridor, the largest absolute increase in trips for Group 1 moved to *bus/MAX* (87).

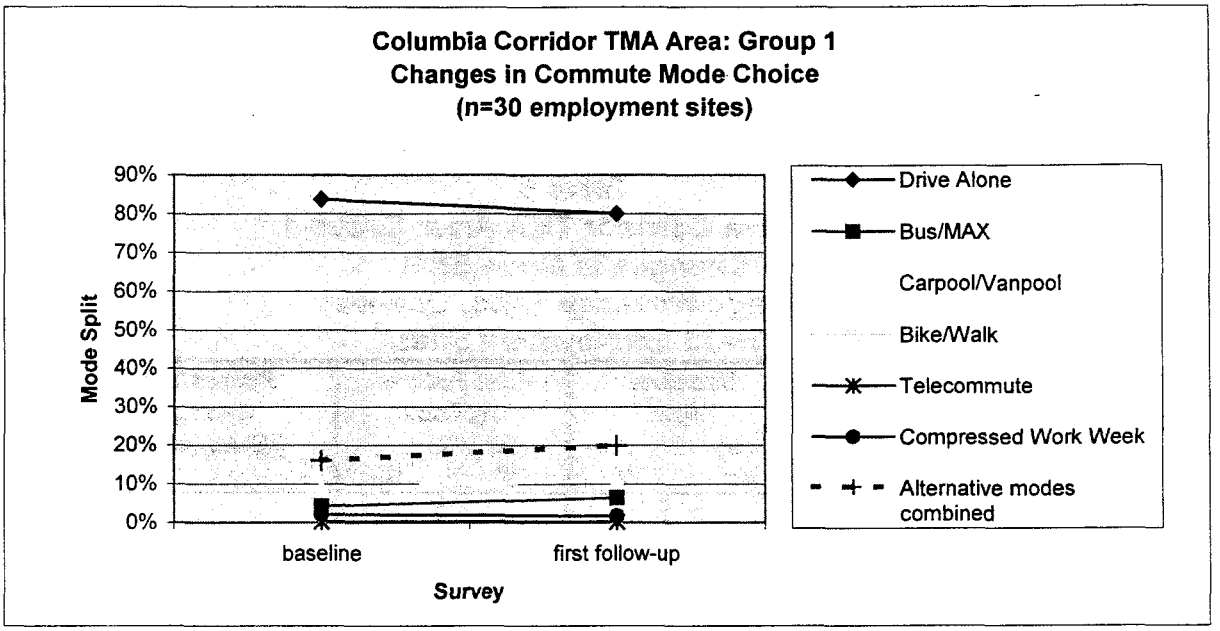
Table 5
Columbia Corridor TMA Area: Group 1
Changes in Mode Split
Average Weekday Trips, One-Way
(n=30 Employment Sites)[1]

Commute Mode	Baseline Trips[2] (A) #	%	First Follow-up Trips (B) #	%	Percentage Change [(B-A)/A]*100
Drive alone	3,478	84%	3,321	80%	-5%
Carpool/Vanpool	370	9%	452	11%	+22%
Bus/MAX	177	4%	266	6%	+51%
Bicycle/Walk	32	1%	34	1%	+5%
Telecommute	7	0%	6	0%	-11%
Compressed work week	87	2%	73	2%	-16%
TOTAL	**4,152**		**4,152**		

[1]Represents estimates for 4,957 employees
[2]Baseline trips are calibrated to follow-up trips to provide a basis for comparison (see Appendix A for a detailed explanation).

Aside from the reduction in *drive alone* trips, increases in *carpool/vanpool* and *bus/MAX* are evident in the graphic to follow. Changes in other modes are difficult to detect given their relatively low usage. When considering all *alternative modes combined* however, increases in such trips nearly mirror the reductions in *drive alone* trips. (Figure 8)

Figure 8



Data Source: responses are representative of 4,957 employees

Changes in Mode Split: Downtown Portland

Changes in mode split for Downtown (Group 1) employment sites were quite noticeable between baseline and first follow-up survey. While *drive alone* trips dropped by 17%, *bus/MAX* usage rose by 24%. When expressed as a "percentage", other alternative modes however displayed decreased usage, in particular *compressed workweek* (-24%) and *telecommuting* (-21%). (Table 6)

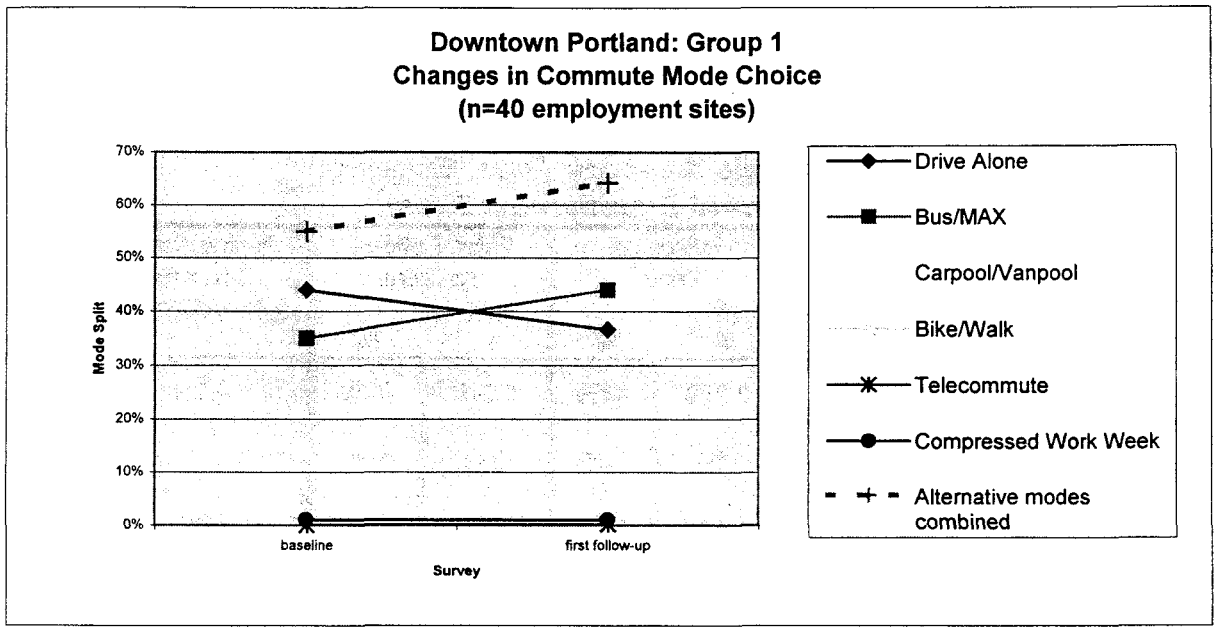
Table 6
Downtown Portland: Group 1
Changes in Mode Split
Average Weekday Trips, One-Way
(n=40 Employment Sites)[1]

Commute Mode	Baseline Trips[2] (A) #	%	First Follow-up Trips (B) #	%	Percentage Change [(B-A)/A]*100
Drive alone	2,259	44%	1,877	37%	-17%
Carpool/Vanpool	719	14%	668	13%	-7%
Bus/MAX	1,801	35%	2,232	44%	+24%
Bicycle/Walk	273	5%	290	6%	+6%
Telecommute	22	0%	17	0%	-21%
Compressed work week	46	1%	35	1%	-24%
TOTAL	**5,119**		**5,119**		

[1]Represents estimates for 5,597 employees
[2]Baseline trips are calibrated to follow-up trips to provide a basis for comparison (see Appendix A for a detailed explanation).

Most apparent in Figure 8 are changes in *drive alone* and *bus/MAX* mode usage. As indicated above, decreases were experienced in *carpool/vanpool, telecommute* and *compressed workweek* usage. When considering all *alternative modes combined*, a greater percentage of trips are made via alternative modes than *drive alone* trips. (Figure 9)

Figure 9



Data Source: responses are representative of 5,597 employees

Changes in Mode Split: Downtown Portland (Group 2)

Employment sites having completed a baseline and a second follow-up survey (Group 2) in Downtown Portland reduced *drive alone* trips by 23%. All other modes experienced increases in usage. When expressed as a "percentage", *compressed workweek* (+170%) and *bus/MAX* (+55%) both experienced increases, with *bus/MAX* experiencing the greatest absolute increase in trips (366). (Table 7)

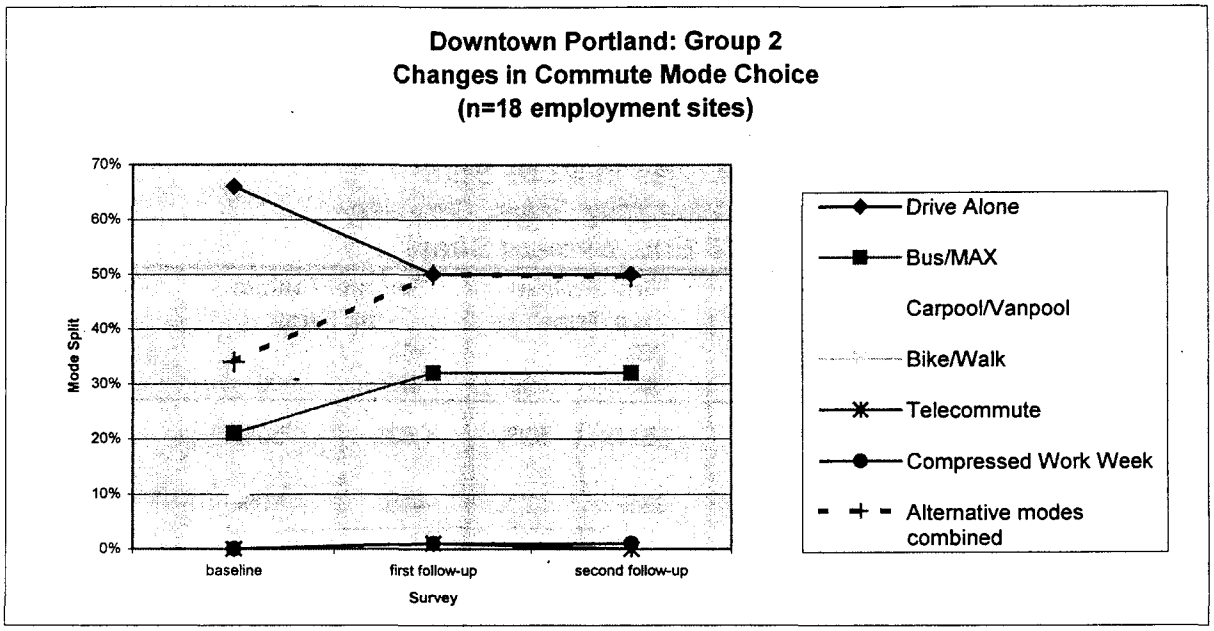
Table 7
Downtown Portland: Group 2
Changes in Mode Split
Average Weekday Trips, One-Way
(n=18 Employment Sites)[1]

Commute Mode	Baseline Trips[2] (A) #	%	First Follow-up Trips[2] (B) #	%	Second Follow-up Trips (C) #	%	Percentage Change [(C-A)/A]*100
Drive alone	2,106	66%	1,610	50%	1,621	50%	-23%
Carpool/Vanpool	336	10%	396	12%	418	13%	+24%
Bus/MAX	665	21%	1,043	32%	1,031	32%	+55%
Bicycle/Walk	92	3%	132	4%	115	4%	+25%
Telecommute	9	0%	17	1%	13	0%	+39%
Compressed work week	7	0%	17	1%	19	1%	+170%
TOTAL	**3,215**		**3,215**		**3,215**		

[1]Represents estimates for 3,456 employees
[2]Baseline and first follow-up trips are calibrated to second follow-up trips to provide a basis for comparison (see Appendix A for a detailed explanation).

Shifts in *drive alone* and *bus/transit* usage are clearly realized when visually presented in Figure 9. All other modes, some more apparent than others, increased in usage. When considering all *alternative modes combined*, such trips share exactly 50% of the trips with *drive alone* trips. (Figure 10)

Figure 10



Data Source: responses are representative of 3,456 employees

Changes in Mode Split: Downtown Portland (Groups 1 and 2 combined)

Table 8

RESULTS COMBINED			
GROUPS 1 & 2 (combined[1])	**Baseline Trips A**	**Follow-up Trips from most Recent follow-up B**	**Percentage Change In Trips [(B-A)/A]*100**
Drive Alone	4,365	3,498	-20%
Carpool/Vanpool	1,055	1,086	+3%
Bus/MAX	2,466	3,263	+32%
Bicycle/Walk	365	405	+11%
Telecommute	31	30	-3%
Compressed work week	53	54	+2%
Auto Trips	**4,860**	**4,008**	**-18%**

[1] 58 employment sites, with 9,053 employees

Changes in Mode Split: Lloyd District TMA Area

Employment sites in the Lloyd District completing a baseline and first follow-up survey, when combined, reduced *drive alone* trips by 5%. The greatest gain in absolute trips was experienced by *bicycle/walk* trips (10). (Table 9)

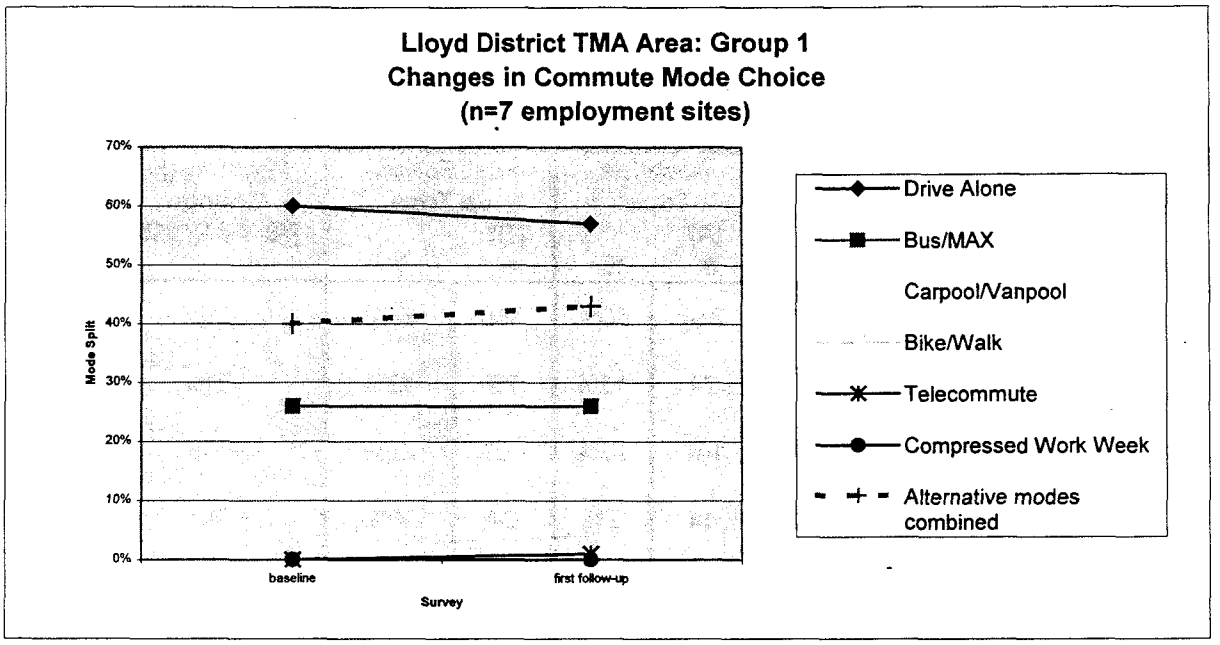
Table 9
Lloyd District TMA Area: Group 1
Changes in Mode Split
Average Weekday Trips, One-Way
(n=7 Employment Sites)[1]

Commute Mode	Baseline Trips[2] (A) #	%	First Follow-up Trips (B) #	%	Percentage Change [(B-A)/A]*100
Drive alone	384	60%	366	57%	-5%
Carpool/Vanpool	74	12%	76	12%	+3%
Bus/MAX	167	26%	169	26%	+1%
Bicycle/Walk	14	2%	24	4%	+74%
Telecommute	0	0%	4	1%	+
Compressed work week	1	0%	2	0%	+52%
TOTAL	**640**		**640**		

[1]Represents estimates for 693 employees
[2]Baseline trips are calibrated to follow-up trips to provide a basis for comparison (see Appendix A for a detailed explanation).

Given the limited amount of data available for Group 1 in the Lloyd-District, Figure 10 reveals only mild changes in mode choice. Most apparent is the decline in *drive alone* and increase in *bike/walk* usage. When considering all *alternative modes combined*, increases are approaching similar levels experienced by *drive alone* trips. (Figure 11)

Figure 11



Data Source: responses are representative of 693 employees

Changes in Mode Split: Lloyd District TMA Area (Group 2)

Employment sites having completed a baseline and a second follow-up survey (Group 2) in the Lloyd District reduced *drive alone* trips by 10%. Changes in other modes were mixed. When expressed as a "percentage", *telecommuting* experienced the largest increase in use (+566%), followed by *compressed workweek* (+76%) and *bus/MAX* (+43%). Both *carpool/vanpool* (-27%) and *bike/walk* (-2%) experienced losses in use. In terms of absolute trips, *bus/MAX* showed the greatest increase in usage (223). (Table 10)

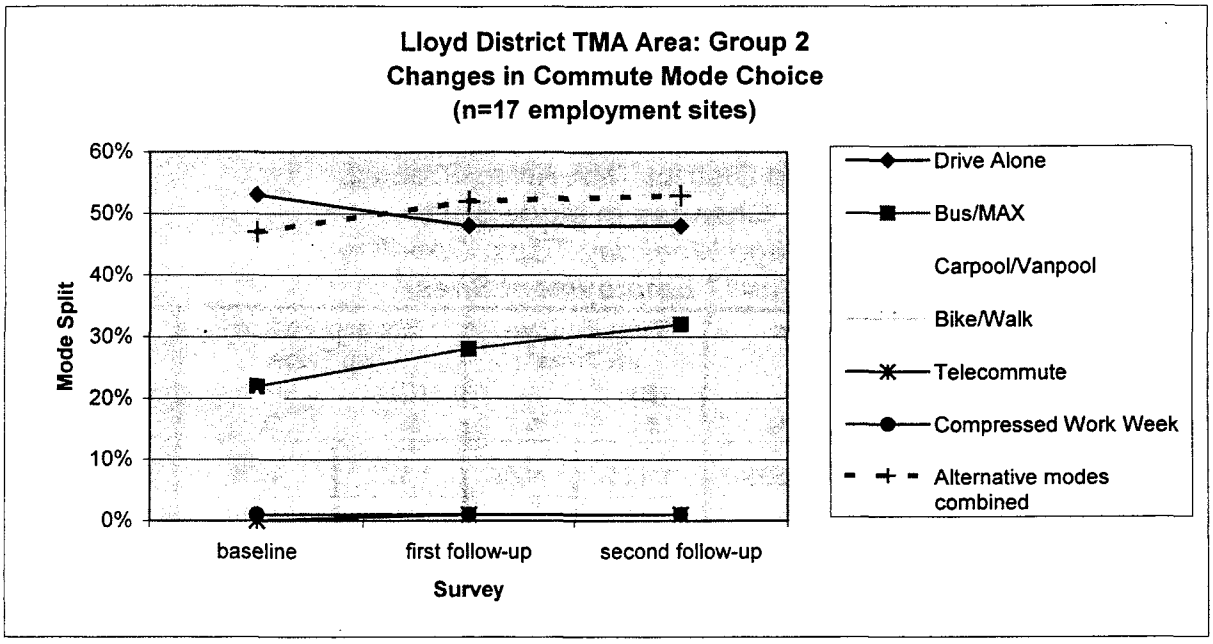
Table 10
Lloyd District TMA Area: Group 2
Changes in Mode Split
Average Weekday Trips, One-Way
(n=17 Employment Sites)[1]

Commute Mode	Baseline Trips[2] (A) #	%	First Follow-up Trips[2] (B) #	%	Second Follow-up Trips (C) #	%	Percentage Change [(C-A)/A]*100
Drive alone	1,247	53%	1,121	48%	1,123	48%	-10%
Carpool/Vanpool	471	20%	429	18%	344	15%	-27%
Bus/MAX	520	22%	656	28%	743	32%	+43%
Bicycle/Walk	93	4%	91	4%	91	4%	-2%
Telecommute	4	0%	24	1%	24	1%	+566%
Compressed work week	13	1%	28	1%	24	1%	+76%
TOTAL	**2,348**		**2,348**		**2,348**		n/a

[1]Represents estimates for 2,464 employees
[2]Baseline and first follow-up trips are calibrated to second follow-up trips to provide a basis for comparison (see Appendix A for a detailed explanation).

Equally apparent was the increase in transit (*bus/MAX*) in Figure 11 and the decrease in commuters traveling via *carpool/vanpool*. The majority of reductions in *drive alone* trips occurred between the baseline and first follow-up survey. When considering all *alternative modes combined*, levels of usage have remained above that of *drive alone* trips. (Figure 12)

Figure 12



Data Source: responses are representative of 2,464 employees

Changes in Mode Split: Lloyd District TMA Area (Groups 1 and 2 combined)

Table 11

RESULTS COMBINED			
GROUPS 1 & 2 (combined[1])	**Baseline Trips A**	**Follow-up Trips from most Recent follow-up B**	**Percentage Change In Trips [(B-A)/A]*100**
Drive Alone	1,631	1,489	-9%
Carpool/Vanpool	545	420	-23%
Bus/MAX	687	912	+33%
Bicycle/Walk	107	115	+7%
Telecommute	4	28	+600%
Compressed work week	14	26	+9%
Auto Trips	**1,887**	**1,686**	**-11%**

[1]24 employment sites, with 3,157 employees

Changes in Mode Split: WTA Area

Increases in *telecommute* (+225%) and *bus/MAX* (+195%) experienced the greatest "percentage" changes in mode usage for Group 1 on the Westside. *Drive alone* trips decreased by four percent while *carpool/vanpool* and *bicycle/walk* trips also experienced decreases (-9% and -33% respectively). (Table 12)

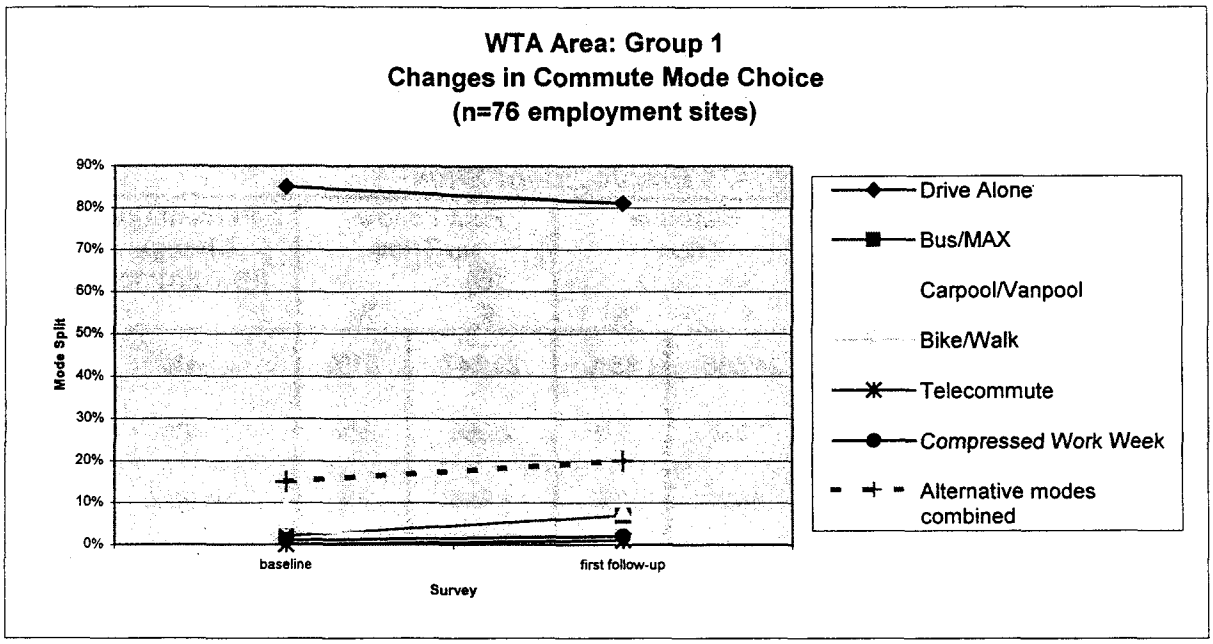
Table 12
WTA Area: Group 1
Changes in Mode Split
Average Weekday Trips, One-Way
(n=76 Employment Sites)[1]

Commute Mode	Baseline Trips[2] (A) #	%	First Follow-up Trips (B) #	%	Percentage Change [(B-A)/A]*100
Drive alone	24,586	85%	23,647	81%	-4%
Carpool/Vanpool	2,587	9%	2,366	8%	-9%
Bus/MAX	643	2%	1,895	7%	+195%
Bicycle/Walk	802	3%	535	2%	-33%
Telecommute	51	0%	167	1%	+225%
Compressed work week	406	1%	465	2%	+15%
TOTAL	**29,075**		**29,075**		n/a

[1]Represents estimates for 30,984 employees
[2]Baseline trips are calibrated to follow-up trips to provide a basis for comparison (see Appendix A for a detailed explanation).

Increases in transit (*bus/MAX*) use exceeded other alternative modes when considering its share of overall trips. This mode accounts for 7% of trips to the worksite on the Westside, while *carpool/vanpool* accounted for 8%. When considering all *alternative modes combined*, increases in such trips nearly mirror the reductions in *drive alone* trips. (Figure 13)

Figure 13



Data Source: responses are representative of 30,984 employees

Changes in Mode Split: WTA Area (Group 2)

Changes in the mode split for Group 2 indicates a strong shift to *bus/MAX*, accounting for a 206% increase in trips via transit. All alternative modes reported experienced increases in usage, while drive alone trips dropped (-12%) from baseline to second follow-up survey. (Table 13)

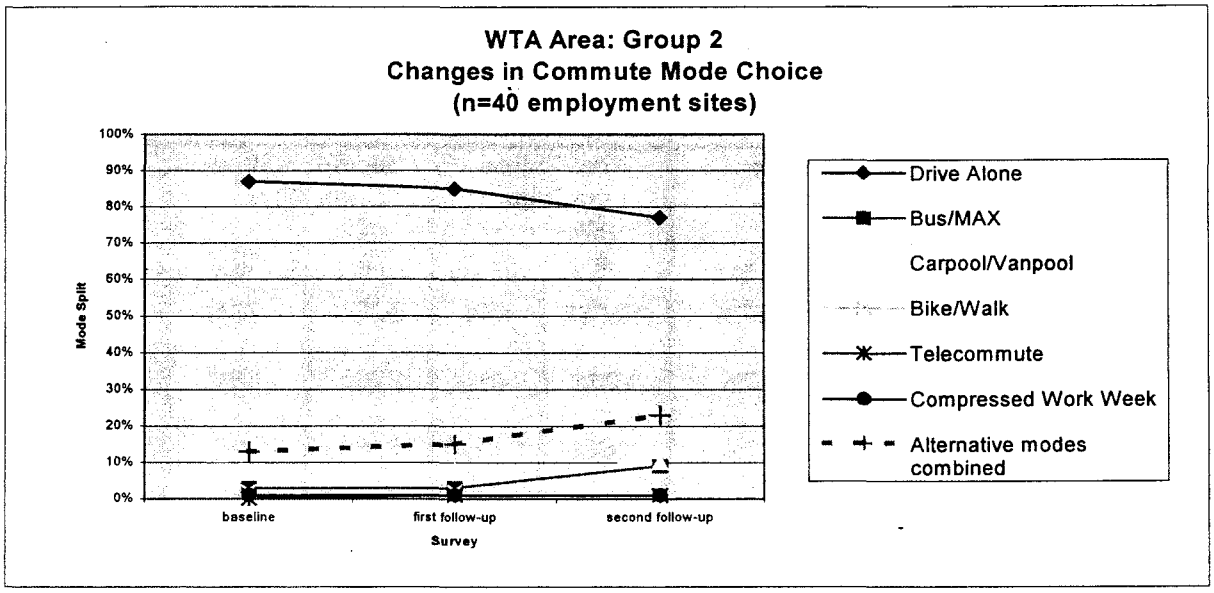
Table 13
WTA Area: Group 2
Changes in Mode Split
Average Weekday Trips, One-Way
(n=40 Employment Sites)[1]

Commute Mode	Baseline Trips[2] (A) #	%	First Follow-up Trips[2] (B) #	%	Second Follow-up Trips (C) #	%	Percentage Change [(C-A)/A]*100
Drive alone	11,031	87%	10,763	85%	9,703	77%	-12%
Carpool/Vanpool	878	7%	1,033	8%	1,305	10%	+49%
Bus/MAX	360	3%	366	3%	1,102	9%	+206%
Bicycle/Walk	216	2%	285	2%	309	2%	+43%
Telecommute	52	0%	65	1%	63	0%	+21%
Compressed work week	89	1%	115	1%	143	1%	+60%
TOTAL	**12,626**		**12,626**		**12,626**		

[1]Represents estimates for 13,635 employees
[2]Baseline and first follow-up trips are calibrated to second follow-up trips to provide a basis for comparison (see Appendix A for a detailed explanation).

Increases in transit (*bus/MAX*) and *carpool/vanpool* trips appear to be replacing trips once made by *drive alone* commuters. Less apparent in Figure 13 is that trips via all other alternative modes listed are increasing. When considering all *alternative modes combined*, a sharp increase in levels of usage has been met equally by strong reductions in *drive alone* trips. Like Group 1, *carpool/vanpool* is the predominant alternative commute mode. (Figure 14)

Figure 14



Data Source: responses are representative of 13,635 employees

Changes in Mode Split: WTA Area (Groups 1 and 2 combined)

Table 14

RESULTS COMBINED			
GROUPS 1 & 2 (combined[1])	**Baseline Trips A**	**Follow-up Trips from most Recent follow-up B**	**Percentage Change In Trips [(B-A)/A]*100**
Drive Alone	35,617	33,350	-6%
Carpool/Vanpool	3,465	3,671	+6%
Bus/MAX	1,003	2,997	+199%
Bicycle/Walk	1,018	844	-17%
Telecommute	103	230	+123%
Compressed work week	495	608	+23%
Auto Trips	**37,244**	**35,073**	**-6%**

[1] 116 employment sites, with 44,619 employees

Changes in Mode Split: Tualatin TMA Area

Employment sites in the Tualatin area have reduced three percent of the *drive alone* trips made to the work site. When expressed as a "percentage", increases in *telecommuting* and *compressed workweeks* (+151%) exceeded increases in any other mode, closely followed by *bicycle/walk* (+150%). In absolute terms most trips have been moved to *compressed workweek* (13) and *bicycle/walk* (12). (Table 15)

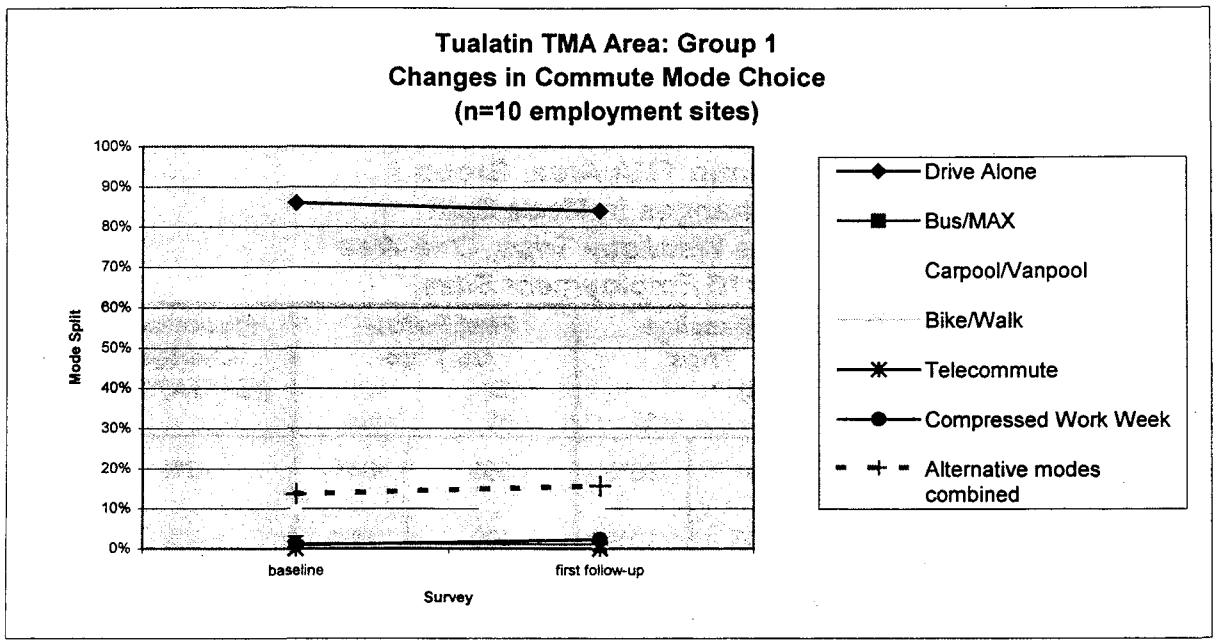
Table 15
Tualatin TMA Area: Group 1
Changes in Mode Split
Average Weekday Trips, One-Way
(n=10 Employment Sites)[1]

Commute Mode	Baseline Trips[2] (A) #	%	First Follow-Up Trips (B) %	%	Percentage Change [(B-A)/A]*100
Drive alone	891	86%	866	84%	-3%
Carpool/Vanpool	108	10%	105	10%	-4%
Bus/MAX	14	1%	11	1%	-19%
Bicycle/Walk	9	1%	22	2%	+150%
Telecommute	0	0%	4	0%	+
Compressed work week	9	1%	23	2%	+151%
TOTAL	**1,032**		**1,032**		

[1]Represents estimates for 1,137 employees
[2]Baseline trips are calibrated to follow-up trips to provide a basis for comparison (see Appendix A for a detailed explanation).

Figure 14 exhibits very slight changes in alternative modes to *drive alone* when expressed as a "percentage". When considering all *alternative modes combined*, increases in such trips nearly mirror the reductions in *drive alone* trips. (Figure 15)

Figure 15



Data Source: responses are representative of 1,137 employees

Changes in Mode Split: Marquam Hill

Employment sites on Marquam Hill have reduced twelve percent of the drive alone trips made to the work site. When expressed as a "percentage", increases in *compressed workweek* and *telecommuting* (+916%) exceeded increases in any other mode, closely followed by *bus/MAX* (+79%) and *bicycle/walk* (+24%). In absolute terms most weekday trips have been moved to *bus/MAX* (4733). (Table 16)

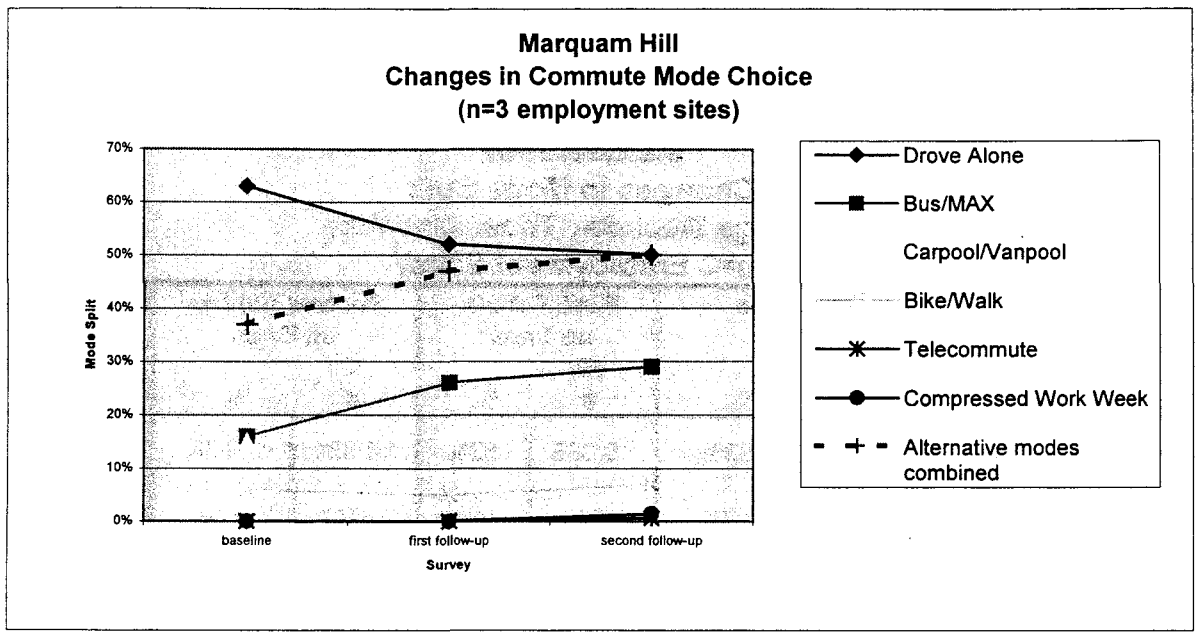
Table 16
Marquam Hill
Changes in Mode Split
Average Weekday Trips, One-Way
(n=3 Employment Sites)[1]

Commute Mode	Baseline Trips[2] (A) #	%	First Follow-up Trips[2] (B) #	%	Second Follow-up Trips (C) #	%	Percentage Change [(C-A)/A]*100
Drive alone	23,226	63%	19,368	52%	18,631	50%	-20%
Carpool/Vanpool	5,677	15%	6,048	16%	4,507	12%	-21%
Bus/MAX	6,011	16%	9,610	26%	10,744	29%	+79%
Bicycle/Walk	2,152	6%	2,004	5%	2,669	7%	+24%
Telecommute	37	0%	74	0%	376	1%	+916%
Compressed work week	0	0%	0	0%	176	1%	+
TOTAL	**37,103**		**37,103**		**37,103**		

[1]Represents estimates for 8,406 employees
[2]Baseline and first follow-up trips are calibrated to second follow-up trips to provide a basis for comparison (see Appendix A for a detailed explanation).

Figure 16 exhibits changes in alternative modes to *drive alone* when expressed as a "percentage". Increases in bus/MAX usage are clearly represented in the graphic below. (Figure 16)

Figure 16



Data Source: responses are representative of 8,406 employees

CONCLUSIONS

Transportation Demand Management efforts continue to make a positive difference in the region, as evidenced by the fact that the majority of employment sites in both groups 1, 2 and 3 have made substantial reductions in the number of auto trips made to the worksite. Together, over five hundred employment sites have reduced 10,730 *weekday* auto trips to and from the worksite region-wide.

Metro projects that the current one-way auto trip commute length in the region is 7.4 miles. Based on this travel distance, approximately 79,402 daily vehicle miles traveled have been reduced. *

Surveys from groups 2 and 3 provide the first look at commute mode changes from baseline through second and third follow-up surveys. The trends in such groups show some leveling-off of commuter trips, changing from driving alone to alternative modes.

This analysis marks the first attempt to focus on TMA areas. While commute data for these areas is limited, preliminary analysis of selected target areas included in this report reveals that progress is positive with regards to reducing drive alone commute trips.

* Equilibrated 1994 Metro Model

APPENDICES

APPENDIX A – Calculating Changes in Trip Levels for XYZ Company

A) Baseline

Employees at XYZ Company made a total of 1000 commute trips as recorded in their baseline survey. The survey showed 70% of the employees drive alone to work, 20% carpool, and 10% take transit.

To determine baseline trips for each transportation mode, multiply the baseline percent of trips for each transportation mode by the total number of trips made, as shown in Table A-1. (A x B = C) or (70% x 1000 = 700)

Table A-1
XYZ Company
Calculating Trip Levels

Transportation Mode	Baseline Percent of Total Trips (A)	X	Total Trips made by Employees (B)	=	Baseline Total Trips (C)
Drive Alone	70%	X	1000	=	700
Carpool	20%	X	1000	=	200
Transit	10%	X	1000	=	100
Total	100%			=	1000

B) Follow-up

As required, the company conducts a follow-up survey and finds that because employment has increased, the total number of employee trips has increased to 2000. The follow-up survey reveals that 60% of all trips are now taken driving alone, 25% by carpool and 15% on transit. The number of follow-up trips for each mode is calculated in the same manner as the baseline trips (A x B =C) or (60% x 2000 = 120). These calculations are shown in Table A-2.

Table A-2
XYZ Company
Follow-up Trip Levels

Transportation Mode	Follow-up Percent Of Total Trips (A)	X	Total Trips made by Employees (B)	=	Follow-up Total Trips (C)
Drive Alone	60%	X	2000	=	1200
Carpool	25%	X	2000	=	500
Transit	15%	X	2000	=	300
Total	100%				2000

C) Converting Baseline Trips to Follow-up Trips

To accurately compare the change between baseline and follow-up trips, baseline trips for each mode must be converted to follow-up trips. To convert baseline trips to follow-up trips, as shown in Table A-3, multiply the baseline percent of total trips for each transportation mode by the total follow-up trips made by employees to obtain the adjusted baseline trips (C). (A x B = C) or (70% x 2000 = 1400)

D) Comparing Baseline Trips to Follow-up Trips

To identify a decrease or increase in trips, regardless of a possible change in the total number of employees between baseline and follow-up surveys, calculate the difference in trips for each transportation mode (F – C = G) or (1200 – 1400 = -200). Changes between follow-up and baseline trips may also be expressed in percentages (G / C = H) or (-200 / 1400 = -14%).

This process is displayed in Table A-3.

Table A-3
XYZ Company
Calculating Trip Levels

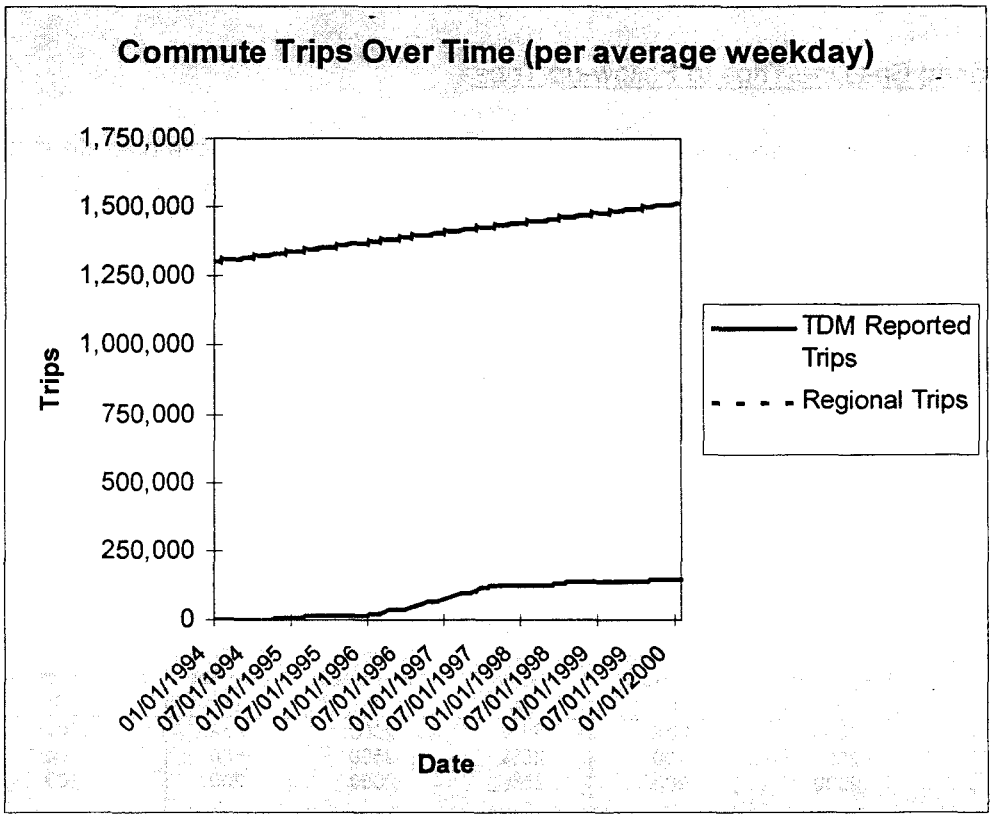
	Conversion (Baseline to Follow-up Trips)			***Follow-up Trips***			***Comparison***	
Transportation Mode	**Baseline Percent of Total Trips (A)**	**Total (follow-up) Trips made by Employees (B)**	**Adjusted Baseline Trips (C)**	**Follow-up Percent of Total Trips (D)**	**Total (follow-up) Trips made by Employees (E)**	**Follow-up Trips (F)**	**Difference in Number of Trips (G)**	**Percentage Difference (H)**
Drive Alone	70%	2000	1400	60%	2000	1200	(200)	(14%)
Carpool	20%	2000	400	25%	2000	500	100	25%
Transit	10%	2000	200	15%	2000	300	100	50%
Total	100%		2000	100%		2000		

As shown in the last column in Table A-3, between baseline and follow-up surveys XYZ Company reduced drive alone trips by 14 percent while carpool and transit trips increased.

APPENDIX B – Program Review

Figure A-1 below shows the growth in average weekday commute from January 1994 to January 2000. The dashed indicates the total regional trips and the solid line represents the proportion of those trips accounted for by the Transportation Demand Management Program.

Figure A-1
TDM Reported Share of Regional Trips[1]



[1]Regional Growth of Commute Trips were published in the "Metro 2020 Strategic Network"

Table A-4
Number of Surveys Processed by Regional TDM Partners and the Number of Employees Represented

Year	Quarter	TM	Employees	DEQ	Employees	Other[1]	Employees	Total	Employees
1994	1	1	25	-	-	-	-	1	25
	2	1	10	-	-	1	1,600	2	1,610
	3	1	17	-	-	-	-	1	17
	4	2	17,500	-	-	-	-	2	17,500
1995	1	7	221	-	-	-	-	7	221
	2	6	11,255	-	-	-	-	6	11,255
	3	2	760	-	-	-	-	2	760
	4	16	22,184	-	-	-	-	16	22,184
1996	1	26	4,870	1	82	1	1,246	28	6,198
	2	36	32,234	1	166	1	126	38	32,526
	3	40	14,485	5	904	-	-	45	15,369
	4	43	28,678	40	7,135	24	893	107	36,706
1997	1	83	9,189	55	10,189	20	2,901	158	22,279
	2	31	6,168	52	8,929	21	3,461	104	18,558
	3	36	9,704	32	5,424	24	14,362	92	29,490
	4	15	2,500	12	2,723	18	2,009	45	7,232
1998	1	23	4,263	29	5,353	12	1,641	64	11,257
	2	79	23,376	43	7,371	23	2,565	145	33,312
	3	68	23,081	53	4,182	20	4,368	141	31,631
	4	31	5,424	33	5,469	5	368	69	11,261
1999	1	26	10,132	24	3,884	3	364	53	14,380
	2	89	67,122	21	5,371	16	3,052	126	75,545
	3	58	14,917	21	2,819	13	1,848	92	19,584
	4	29	5,146	67	10,746	2	109	98	16,001
2000	1	3	348	45	5,722	0		45	6,070
Total		752	313,609	526	86,469	204	40,913	1487	440,991

[1]Other includes Lloyd District Transportation Management Association, Westside Transportation Alliance, and employers working with consultants.

Table A-5
Oregon Office of Energy
Business Energy Tax Credits for Transportation Projects[1]

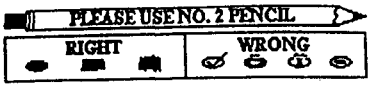
	Quarter	Telework Approved (Applied)	Transit Approved (Applied)	Commuter Pool Veh. Approved (Applied)	Financial Incentives Approved (Applied)	Bicycle Approved (Applied)	TMA Dues Approved (Applied)
1992	1	0 (0)		0 (0)			
	2	0 (0)		0 (0)			
	3	0 (0)		0 (0)			
	4	1 (1)		1 (1)			
1993	1	0 (0)		0 (0)			
	2	0 (0)		0 (0)			
	3	0 (0)		0 (0)			
	4	0 (0)		0 (0)			
1994	1	0 (0)		0 (0)			
	2	0 (0)		1 (1)			
	3	0 (0)		0 (0)			
	4	2 (2)		0 (0)			
1995	1	0 (0)		0 (0)			
	2	0 (0)		0 (0)			
	3	0 (0)		0 (0)			
	4	2 (2)		0 (0)			
1996	1	8 (8)		0 (0)			
	2	0 (0)		0 (0)			
	3	1 (1)		0 (0)			
	4	0 (0)		0 (0)			
1997	1	1 (1)		0 (0)			
	2	1 (1)		0 (0)			
	3	0		0			

		(0)		(0)			
	4	2 (2)		0 (0)			
1998	1	1 (1)	2 (2)	0 (0)			
	2	2 (2)	11 (11)	0 (0)			
	3	0 (0)	7 (8)	0 (0)			
	4	1 (1)	5 (5)	0 (0)			
1999	1	1 (1)	12 (13)	0 (0)			
	2	1 (2)	1 (2)	0 (0)			
	3	1 (1)	2 (2)	0 (0)			
	4	0 (0)	1 (1)	0 (0)			
2000	1	1 (1)	12 (12)	0 (0)	1 (1)	0 (0)	1 (1)
Total		26 (27)	53 (56)	2 (2)	1 (1)	0 (0)	1 (1)

[1]BETC's for Washington, Clackamas, and Multnomah counties compiled by OOE on June 8, 2000.

APPENDIX C – Survey Instruments

Employee Commute Options Survey
Department of Environmental Quality



DEAR EMPLOYEE: Please take a few minutes to fill out this questionaire and return it as instructed. Mark your answers clearly and neatly, following the examples above.

1. **How did you travel to work during the last week you worked? If you used more than one method, mark the one in which you traveled the FARTHEST. All days should have only ONE answer marked.**

	S	M	T	W	TH	F	S
Drove alone (or motorcycled)							
Rode the Bus or Max							
Carpooled or Vanpooled							
Bicycled							
Walked							
Telecommuted							
TOOK DAY OFF FOR:							
Compressed Work Week							
Other reason (reg. day off, etc.)							

DEFINITIONS:
Carpool or Vanpool: 2 or more persons in a car or van travelling to work.
Telecommute: Work done at home during regular work hours (rather than at your usual work site).
Day Off for Compressed Work Week: A day off work because you work a full-time schedule in less than five days per week, e.g., four 10-hour days

2. If you carpooled or vanpooled to work in your answer above, how many people were in the car or van? (Include yourself, mark the best ONE)

2 3 4 5 6 7 8 9 10 11 12 13 14 15

Office Use Only

6	7	7			

THANK YOU!

Revised October 20, 1997

EMPLOYEE COMMUTE OPTIONS SURVEY

DEAR EMPLOYEE: Please take a few minutes to fill out this questionnaire and return it as instructed. Mark your answers clearly and neatly in the boxes like this: ■

1) How did you travel to work during the last week you worked? If you used more than one method, mark the one in which you traveled the **farthest**. All days should have only **ONE** answer marked.

17-23

		S ⇩	M ⇩	T ⇩	W ⇩	T ⇩	F ⇩	S ⇩
DROVE ALONE (or motorcycled)	1	☐	☐	☐	☐	☐	☐	☐
RODE THE BUS or MAX	2	☐	☐	☐	☐	☐	☐	☐
CARPOOLED or VANPOOLED	3	☐	☐	☐	☐	☐	☐	☐
BICYCLED	4	☐	☐	☐	☐	☐	☐	☐
WALKED	5	☐	☐	☐	☐	☐	☐	☐
TELECOMMUTED	6	☐	☐	☐	☐	☐	☐	☐
TOOK DAY OFF FOR:								
COMPRESSED WORK WEEK	7	☐	☐	☐	☐	☐	☐	☐
OTHER REASON (reg.dayoff, etc.)	8	☐	☐	☐	☐	☐	☐	☐

DEFINITIONS:
Carpool or Vanpool: Two or more persons in a car or van traveling to work.
Telecommute: Work done at home during regular work hours (rather than at your usual work site).
Day Off for Compressed Work Week: A day off work because you work a full-time schedule in less than 5 days per week, eg., four 10-hour days.

2) ***IF YOU CARPOOLED OR VANPOOLED*** to work in your answer above, how many people were in the car or van? (Include yourself; mark the best ONE)

25-26

2	3	4	5	6	7	8	9	10	11	12	13	14	15
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

3) ***IF YOU DRIVE ALONE TO WORK:*** Mark up to three reasons for using the commute method you use.

28-47

- ☐1 Need car for errands
- ☐2 Saves time
- ☐3 Irregular work schedule
- ☐4 Want car for emergencies
- ☐5 No one to carpool with
- ☐6 Saves money
- ☐7 Need car for work
- ☐8 Drop off children
- ☐9 No bus/MAX where I live
- ☐10 No bus/MAX where I work
- ☐11 Buses don't run during hours I commute to/from work

4) ***IF YOU DRIVE ALONE TO WORK:*** What benefit would encourage you to try an alternative to driving alone to work? *(Mark as many as apply.)*

50-81

- ☐1 Reserved parking for carpools or vanpools
- ☐2 Guaranteed ride home for personal emergencies
- ☐3 Incentives for carpools or vanpools (for example:free lunch, discount coupons,etc.)
- ☐4 Help finding carpool or vanpool partners
- ☐5 Secure bike lockers or racks
- ☐6 Showers for bike riders or walkers
- ☐7 Employer pays part of cost of a Tri-Met pass
- ☐8 Tri-Met passes sold at work
- ☐9 Compressed work week (for example:4 ten-hour days)
- ☐10 Flex-time (employee chooses schedule)
- ☐11 Telecommuting (work at home part of week)
- ☐12 Company car available for work travel
- ☐13 Orientation and personal bus/MAX trip planning
- ☐14 Transportation bulletin board
- ☐15 Express bus from park & ride lot to work
- ☐16 Employer provided van for vanpool

5a) During the past ***month***, how many trips did you make on a Tri-Met bus or MAX for *any purpose*? *(Count each direction as a separate trip)*_____ *(If none, skip 5b)*

82-83

5b) How many of your trips in Question 5a (above) were for travel to or from work? *(Count each direction as a separate trip)* _____

84-85

THANK YOU!

ECOgen1
Dec. 5, 1996

APPENDIX D – Survey Data Form

SURVEY DATA FORM

Please complete both sides of this worksheet for each work site and return it with the surveys for that site.

WORK SITE INFORMATION

Today's date: _____

Company name: _____

Site name: _____

Site address: _____

City: _____ Zip code: _____

COORDINATOR INFORMATION

Transportation Coordinator: _____

Title: _____

Phone: _____ Fax: _____

E-mail: _____

SURVEY INFORMATION

Date survey was distributed: _____

Date of deadline for employees to return surveys: _____

SURVEY RESULTS

Would you like Tri-Met to send a copy of your survey results to DEQ for your ECO Rules requirements?

YES ☐ NO ☐

Can we share your survey results with the transportation management association (TMA) in your area, if there is one?

YES ☐ NO ☐

RETURNING YOUR SURVEYS

Who is your Tri-Met marketing representative?

_____

Return this form with the site's completed surveys to:
(your Tri-Met marketing representative)
Tri-Met Marketing
4012 SE 17th Ave.
Portland, OR 97202

EMPLOYEE COUNTS

How you count employees for your survey varies, depending on the purpose of your survey. Please complete the appropriate sections bel for your survey.

	EMPLOYEE COUNT TOTALS
Total number of employees at your work site	1. _____
Total number of *ECO eligible employees**	2. _____
Total number of *PASSport qualified employees***	3. _____
Total number of employees and/or volunteers in a *PASSport exempted group*† that you surveyed	4. _____
Random sample size at this site (see Random Sampling section in Coordinator's Kit)	5. _____
Total number of surveys returned	6. _____
Survey response rate: *line 6 ÷ line 2 OR line 6 ÷ line 3, whichever is larger. If surveying a PASSport exempted group only, line 6 ÷ line 4. If random sampling, use line 6 ÷ line 5.*	7. _____

* *ECO eligible employees:* Temporary or regular employees on or expected to be on the payroll for at least six months who work 80 hours or more in a 28-day period. Excluded are volunteers, persons working on a non-scheduled work week, and field personnel required to use a personal vehicle as a condition of employment.

***PASSport qualified employees:* To receive the reduced rate per employee, passes must be purchased for all temporary or regular employees on or expected to be on the payroll for at least six months who work 80 hours or more in a 28-day period. Exempted are employees who work less than 80 hours in a 28-day period, volunteers, those on non-scheduled work weeks, those needing their vehicle as a condition of their job, temporary or seasonal employees hired for a limited term of less than six months, those exempted from DEQ's Employee Commute Options rule, those with an Annual Pass from another source, those working shifts that start or end during times when Tri-Met does not provide service, those with their permanent residence located 20 or more miles outside the Tri-Met district boundary and independent contractors.

† *PASSport exempted employees:* Employers have the option to purchase passes for any exempted group of employees outlined above. Employer must survey and purchase passes for 100% of the exempted group.

TRI-MET

PLEASE COMPLETE OTHER SIDE.

APPENDIX D – Survey Data Form, continued

SIDE 2 The following questions are about this work site.

BUS/MAX INFORMATION

	YES	NO
Does this site have a bus or MAX stop within ¼ mile? (Five blocks in downtown Portland or four blocks outside of downtown)	☐	☐
Is bus service available every 30 minutes or more often during peak commuting hours?	☐	☐

PARKING INFORMATION

	YES	NO
Does your company own, lease or pay for parking for any employees at this site?	☐	☐
If your company owns or leases parking spaces, are employees charged for parking?	☐	☐

If yes...approximately how many are charged?

☐ every employee ☐ over half the employees

☐ less than half ☐ other _____

And if yes...how much are they charged?

_____

Does your company offer a subsidy or reimbursement for employee parking costs?	☐	☐

If yes...What is the subsidy or reimbursement amount?

_____

Is free parking available for your employees?	☐	☐

Please indicate the availability of parking spaces for employees (excluding customers and visitors):

There are empty spaces available most days	☐	☐
All spaces are filled most days	☐	☐
There are not enough spaces most days	☐	☐
Within the next year, does your company foresee a shortage of parking spaces for employees?	☐	☐

CURRENT TRANSPORTATION PROGRAM

Which of the following transportation programs or services does your company provide to your employees? Only mark "yes" on those items that your company *actively* promotes and/or informs employees about.

Bicycling/Walking	YES	NO
Secure bike lockers or racks	☐	☐
Showers for bike riders or those walking to work	☐	☐
Financial incentives for bike riders	☐	☐

If yes...What type of incentive(s) do you offer?

_____

Bus/MAX	YES	NO
Subsidy to cover part or all of the cost of a Tri-Met pass	☐	☐

If yes...What is the subsidy amount? _____

Tri-Met passes/tickets sold at the work site	☐	☐

Carpool/Vanpool	YES	NO
Reserved parking spaces for carpools or vanpool	☐	☐

If yes...How many spaces? _____

Parking discounts for carpools or vanpools	☐	☐

If yes...What is the discount? _____

Incentives for carpools or vanpools (such as free lunches, discount coupons, gift certificates, etc.)	☐	☐

If yes...How often are they offered?

☐ monthly ☐ weekly ☐ other (please specify):

_____

Assistance matching carpool partners or vanpool participants	☐	☐

If yes...What format does your company use for employee matching requests?

☐ online/computer ☐ paper form
☐ in-person ☐ Tri-Met Matching Form

Van provided for vanpool commuters	☐	☐

If yes...Is the van: ☐ company-owned ☐ leased

Support and Promotional Programs	YES	NO
Guaranteed ride home for personal emergencies	☐	☐
Company car(s) available for work-related travel	☐	☐
Information about your company's transportation program included as part of new employee orientation	☐	☐
Tri-Met's New Employee Kits used	☐	☐
On-site personal bus or MAX trip planning available	☐	☐

If yes...How is it made available?

_____

Up-to-date transportation information bulletin board	☐	☐

If yes...How often is it updated?

☐ weekly ☐ monthly ☐ other _____

Flex-time (employees may choose their schedule to accommodate use of alternative commuting methods)	☐	☐

Work Alternatives	YES	NO
Compressed work week (40-hour week worked in less than five days; e.g., four 10-hour days)	☐	☐
Telecommuting (certain employees regularly work at home or at a remote office near home one or more days a week)	☐	☐

Other Transportation Program Elements

Please specify: _____

THANKS!

For office use only

Current Survey (mo/yr):

- ☐ Baseline _____
- ☐ 1st Year Follow-up _____
- ☐ 2nd Follow-up _____
- ☐ 3rd Follow-up _____
- ☐ 4th Follow-up _____

Results Format: _____

- ☐ Each Individual Site _____
- ☐ All Sites Combined _____
- ☐ Other (Please Specify) _____

_____

Rep Initials: _____

COMMITTEE TITLE JPACT

DATE 11-9-00

NAME	AFFILIATION
Fred Hansen	TRI-MET
Rod Monroe	Metro Council
Kvistad	"
Andy Cotugno	Metro
Serena Cruz	Mult. Co.
Karl Rondeau	C³
Jim Knight	4.C.E.C.
Kay Van Sickel	ODOT
Don Wagner	WSDOT
Annette Liebe	DEQ
Dave Lohman	Port of Portland
ED. WASHINGTON	METRO
~~Tri-Met~~ Lynn Peterson	Tri-Met
Tony Mendoza	Tri-Met
Richard Brandman	metro
Bill Barber	metro
Lynn Peterson	Tri-Met
Tony Mendoza	Tri-Met

(Next page)

COMMITTEE TITLE JPACT

DATE 11-9-00

NAME	AFFILIATION
Dave Williams	ODOT
Mike Hoglund	Metro
Clark Berry	Wash. Co
JADUAL WAKTU ADA	BANGLADESH STATE RAILWAY
David Bragdon	Metro Council
John Houser	Metro Council
Ron Papsdorf	City of Gresham
Ed Immel	ODOT - Rail
Gary Katsion	TPAC - Citizen member
Marc Guthrie	Comm. Charlie Hales - City of PDX
STEPHAN LASHBROOK	CITY OF WILSONVILLE
[illegible]	Port of Portland
Ross Williams	ODOT/CLK
Martha Bennett	City of Milwaukie
Cindy Edwards	Westside Transp. Alliance
Victoria Brown	Tualatin TMA + Chamber of Com.
Rob Drake (in late) sub	Cities of Wash. Co.
Bill Kennemer (in late) sub	Clackamas Co.